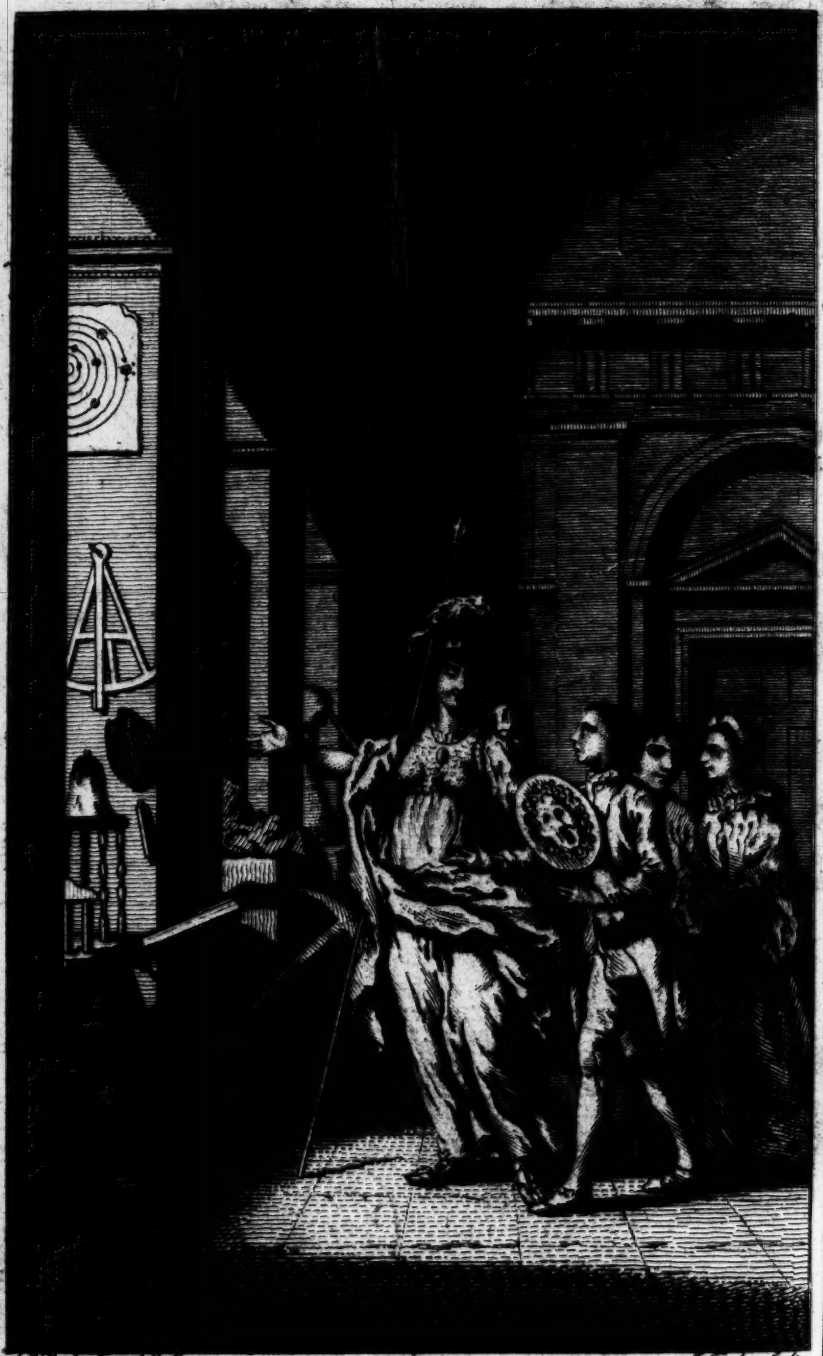


J. Wale inv.t et delin.t J. Taylor sculp.

Duce Minerva.

J. Wale inv.t et delin.t J. Taylor sculp.

Duce Minerva.

250 k 21

The GENERAL MAGAZINE OF ARTS and SCIENCES,

Philoſophical, Philological, } *Mathematical, Mechanical, &c.*

Comprehending all

The Branches of Uſeful Knowledge,

ON AN IMPROVED PLAN.

ILLUSTRATED

With COPPER PLATES,

REPRESENTING

The various Productions of Nature, with the different INSTRUMENTS, MACHINES, FIGURES, SCHEMES, and TOOLS, according to the lateſt Improvements.

To which will be added,

The political State of *Europe*, and a *candid Review* of the moſt intereſting *Books*.

LONDON:
Printed for W. OWEN, at *Homer's Head*, near *Temple-Bar*, *Fleet-ſtreet*.
MDCCLXIV.

INTRODUCTION.

THE Proprietor and Editors of the GENERAL MAGAZINE of ARTS and SCIENCES on a NEW PLAN, beg Leave to repreſent to the Public, that in the former Parts of this Work, continued from the Beginning of 1755, to the Cloſe of the laſt Year, under the Conduct of Mr. MARTIN, are delivered, *the Philoſophy of the Heavens and of the Atmoſphere; a Survey of the Works of Nature and Art; the Uſe of the Globes; the Doctrine of Light and Colours; the Conſtruction and Uſe of optical Inſtruments; the Philoſophy of Sounds and Muſic, with the Organization of the Ear. The Natural Hiſtory of* England: *Theology, Ethics, Judaiſm, Paganiſm, Chriſtianity, Mahommedaniſm. Philoſophical Geography; Arithmetic, Algebra, Geometry, Trigonometry, Conics, Fluxions: Univerſal Optics and Perſpective: Navigation, Gunnery, Clock-Work, and Biography of the Learned*; beſides a great Variety of Mathematical and Miſcellaneous Correſpondence.

That theſe Endeavours have been honoured with the favourable Reception and Suffrage of the Public, and the Plan objected to but in one Particular; namely, that of printing each Branch of Science in a ſeparate Half Sheet, and continuing it in that Form from

Month to Month, to the diſagreeable Interruption and Suſpenſion of the Readers Curioſity and Attention. To this Complaint, therefore, the preſent Editors have determined to pay a juſt Regard, by endeavouring, as near as poſſible, to render each Number compleat in itſelf, and independent of the preceding or ſubſequent ones.

It will be manifeſt, to the judicious Reader, from the above Recital of what has been already done, that many Parts of the general Plan have not yet been introduced, and that there is ſtill before us a ſpacious Field for exhibiting numerous Objects of Science, and Subjects truly intereſting and entertaining: And that it may not be ſuſpected we here ſpeak in too general Terms, and loſe Sight of the true Idea of our Deſign, we ſhall mention ſome of the many Particulars which we intend to treat of in the Proſecution of this Magazine; as *Metaphyſics*, *Mechanics*, *Botany*, *Chemiſtry*; *Hiſtory natural*, *civil*, *and military*; *Grammar*, *Rhetoric*, *Logic*, *Agriculture*, *Mineralogy*, *Zoology*, *Architecture*, *Manufactures*, *&c. &c.* Our Purpoſe and Deſign being, as heretofore, to promote Knowledge in all its Branches; we have collected ſuch a new Stock of Materials at home, together with Tranſlations of ſelect and valuable Pieces of foreign Literature, as we flatter ourſelves will enable us to proceed with Spirit and Vigour; nevertheleſs we ſhall at all Times receive gratefully, and with due Acknowledgment, the Favours of our Correſpondents, though on Matters of mere Curioſity, News, Wit, Novelty, or polite Entertainment.

From

From the bare Enumeration of the Subjects which are from Time to Time to compoſe our Work, the Utility of it muſt be ſufficiently obvious. We preſume however that it may likewiſe carry with it certain important Advantages not ſo readily to be apprehended; ſuch as ſecuring or reſtoring Inventions to their true Authors; bringing to Light many valuable little Pieces (*chartæ fugitivæ*) which otherwiſe might have eſcaped the Preſs, or being printed, have lain concealed in bulky Volumes among Things of a different Nature; and, to mention no more, the eaſy Opportunity that is hereby offered to any Perſon who intends to publiſh a conſiderable Work, or ſet on Foot ſome uſeful Project, of communicating his Scheme to the Public, and placing himſelf in a likely Situation to receive new Hints or Aſſiſtance towards compleating his Deſign.

In the Courſe of our Publications we ſhall be careful to diſtribute the ſeveral Articles with a certain Regularity and Proportion; without ever preſuming to alter the Sentiments, Arguments, or Way of ſtating Facts, of any of our Correſpondents; but may ſometimes, perhaps, take the Liberty or varying the Form of an Expreſſion, if thought neceſſary.

Our Extracts and Reviews of Books, Engliſh or Foreign, ſhall be made with Candour and Impartiality; nor would we willingly admit any Communication of a controverſial Nature which is not drawn up with the ſtricteſt Decency.

The Deſcription and Uſes of ſuch Mathematical and Philoſophical Inſtruments as have not been treated

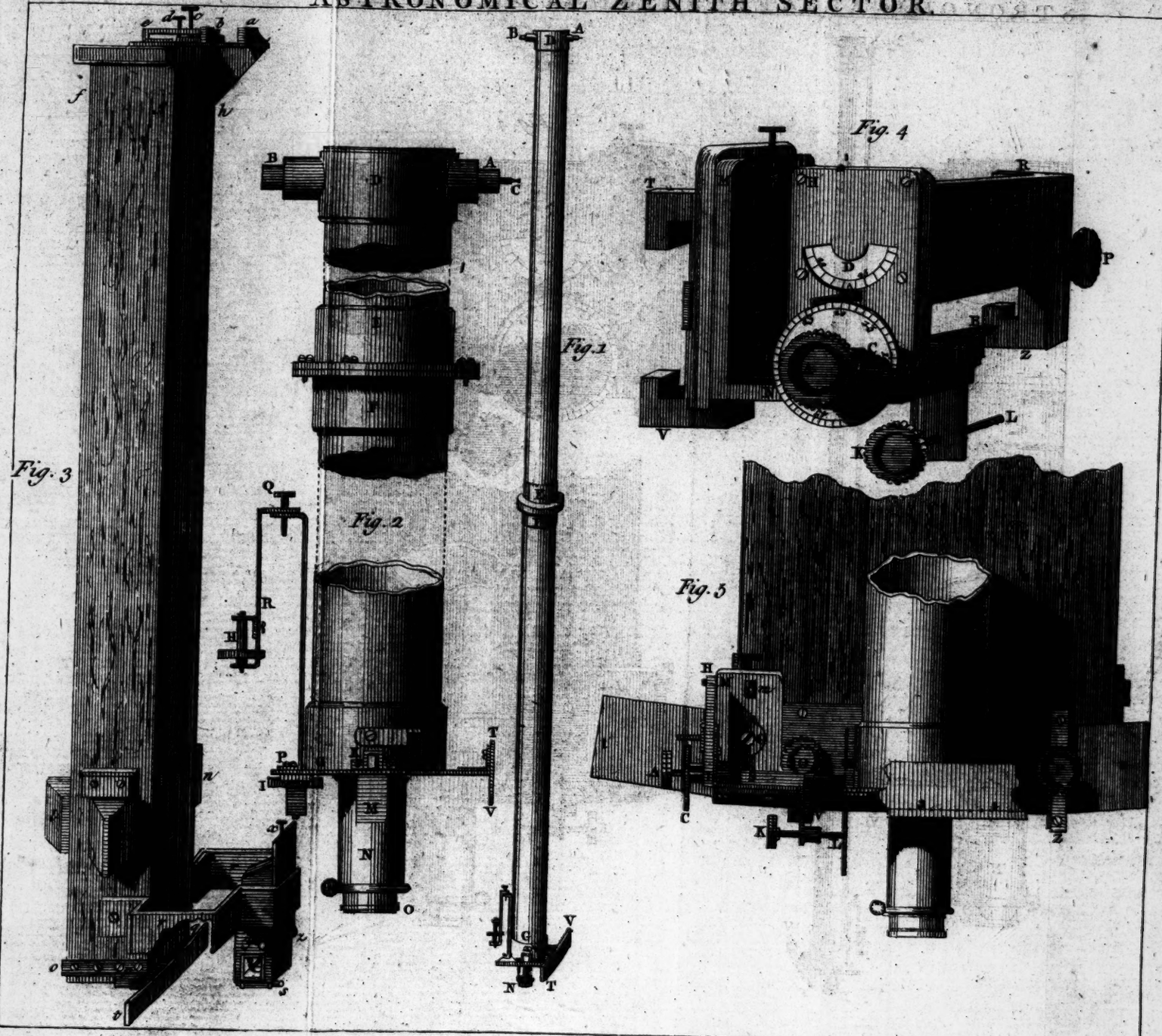
treated of in the former Parts, claim our moſt careful Attention; and herein no Expence will be ſpared for procuring accurate Deſigns and elegant Engravings to illuſtrate and explain their particular Conſtructions.

To conclude, we ſhall do our utmoſt to execute the whole of our Undertaking conformable to the general improved Plan, and to the Satisfaction of our Readers; expecting the Favour and Encouragement of the Public only ſo far as we ſhall appear to pay a proper Regard to what we have profeſſed.

As long as chequ'd Variety ſhall pleaſe,
And labour'd Science wear the Dreſs of Eaſe;
While Nature, Arts, and Morals all unite,
Be ours the Taſk to profit and delight.

The

ASTRONOMICAL ZENITH SECTOR.



THE CONTENTS OF THE SIX NUMBERS

Which are already publiſhed

OF

The GENERAL MAGAZINE:

ON AN IMPROVED PLAN.

Printed for W. OWEN, near *Temple-Bar*.

(Price SIX-PENCE.)

N°. I. for *January*, 1764, contains,

INTRODUCTION.
OF Aſtronomical Zenith Sectors. — Dr. *Hooke*'s Inſtrument erected at *Greſham* College; — M. *Picard*'s — M. *Caſſini*'s — Mr. *Molineux*'s — and Dr. *Bradley*'s.
Conſtitutional Hiſtory of *England*.
Parliament, Definition of it.
Commons, when firſt ſummoned.
Origin of the Title of Prince of *Wales*.
Baron, the ancient Signification of that Title.
Biſhops and Barons repreſented in Parliament of old, by Proxys.
Firſt King's Speech in Parliament.
Agriculture. — Of Earths with reſpect to the Growth of Plants.
Life of *James Caſſini*.
Account of ſeveral of his Writings
Natural Hiſtory of *Dumfries-ſhire*. — *Moffat*: Mineral Waters there.
A Compoſition in Imitation of Amber.
A Phyſico-mathematical Problem, with its Solution.
Mathematical Queſtions to be anſwered.
Eclipſes of *Jupiter*'s Satellites in *February*.

Poetry.

The Delicate Fair, compoſed by Mr. *Arne*.
On the Chevalier *de la Condamine*.
The Violet, by Mr. *Hayden*.
Collin and *Phillis*
Hymen and *Cupid*.
A Character.
Candid Review of 7 new Books.
A Summary Account of the late War.
Chronological Memoir of Occurrences.

This Number is illuſtrated with three Copper-plates, viz. 1. A Frontiſpiece, deſigned by *Wale*, and engraved by *Taylor*: 2. An Aſtronomical Zenith Sector, conſtructed by the late Mr. GRAHAM: And, III. A whole Sheet Map of *Great-Britain* and *Ireland*, and Part of *France*, by *Bowen*, finely coloured.

N°. II.

N°. II. for *February*, 1764, contains,

DESCRIPTION and Uſe of a Machine to diſengage the Horſes, abſolutely and at once, from a Coach, or other four Wheel Carriage, when they are Head-ſtrong and run away.
Inſtitutions of Natural Hiſtory.
The Natural Hiſtory of Man.
Dr. *Linnæus*'s Diſtinction of Mankind.
The Anatomy of the Human Body.
Of the Subdiviſions of Mathematical Inſtruments.
Tycho Brahe's *Aſtronomiæ Inſtauratæ Mechanica.*
Digges's Method of Diagonals.
Peter Vernier's Conſtruction of the Quadrant.
Joan. Bap. Morinus's Method of graduating Inſtruments.
Of Spontaneous Combuſtions, by Mr. *Du Hamel.*
Volcanos accounted for, by M. *Lemery.*
A ſignal Example of a Combuſtion at *Breſt.*
Mr. *R. Roe*'s Account of an extraordinary Foſſil found in a Lead-mine in the Peak of *Derbyſhire.*
The Marquis *Scipio Maffei*'s wonderful Account of the Death of a Lady.
Of Roots, the various Forms, *&c.*
Memoirs of the Houſe of *Brunſwick.*
A ſummary Account of the Trial of *W. Owen*, for a Libel.
Mathematical Correſpondence.
Calculations of the great Solar Eclipſe.
Barometrical Obſervations.
To make red Coral Branches, for embelliſhing of Grottos.

Seleſt Pieces of Poetry.

Verſes written by an unfortunate young Lady.
A Tranſlation of the *French* Verſes in our laſt Magazine on *Condamine.*
Ænigma for the Ladies.
A Rebus.
Ænigma to Mr. *Thomas Sadler.*
A New Year's Ode.
Imitations of *Theocritus*, *Caſſimir*, and *Juvenal*, by the late Mr. *James Harvey.*
On the *Camera Obſcura.*
To a young Lady, with a Preſent of Shells, *&c.* for a Grotto.
A Candid Review of 19 new Books.
Chronological Memoirs of Occurrences.

This Number is illuſtrated with three Copper-plate Prints, viz. 1. and 2. The Portraits of their Royal and Serene Highneſſes the Prince and Princeſs of *Brunſwick*, taken from original Drawings and the Life, being eſteemed the greateſt Likeneſſes that have been executed, and done in a maſterly Manner. 3. A Machine to diſengage the Horſes, abſolutely and at once, from a Coach, or other four Wheel Carriage, when they are Head-ſtrong, and run away.

N°. III. for *March*, 1764, contains,

ON the Uſe and Abuſe of the polite Arts: — their Degeneracy into Oſtentation through Luxury: — the antient Paterns to be ſtudied and imitated: — allegorical Pictures deſcribed and applauded.
An Account of ſeveral Rivers in *Normandy*, and other Parts of *France*, which loſe themſelves, and afterwards appear again.
Curious paradoxical Experiments relative to Viſion, deſcribed and explained: — the *Retina* inſenſible where the optic Nerve enters: — the Purpoſe of Nature in placing the optic Nerves out of the optic Axes — Diſpute between *Mariotte* and *Picquet* about the principal Organ of Viſion.
Of the Logarithms of decimal Fractions.
Of the Theory of the Subdiviſions of mathematical Inſtruments: — of Subdiviſion by Diagonals: — of *Vernier*'s Method of Subdiviſion, commonly called the *Nonius.* —— The Method by the *Nonius* preferable, and why.
Sketches of Carriages conſtructed for the Uſe of Agriculture.
An Improvement on the Waggon, by Mr. *Bellas* of *Yattendon* in *Berks.*
An Account of Symptoms ariſing from eating the Seeds of Henbane, with their Cure, *&c.* and ſome remarks, by Sir *Hans Sloane.*
Deſcription of white Gold, or *Platina.*
Curious Obſervations on luminous Particles on the Surface of the Sea, or the Sea Iris, and ſhining Exhalations.
Of the Origin and Formation of Muſk.
The Egyptian Manner of embalming human Bodies, and Birds.
An Account of the Catacombs.
On the pernicious Cuſtom of drinking ſpirituous Liquors in a Morning.
A Table, uſeful in the Admeaſurement of Land.
A Method to make Lacque, or Varniſh.
A Journal of *Farenheit*'s Thermometer at *Halifax, Nova Scotia.*
Mathematical Queſtions anſwered.
New Queſtions to be anſwered.
Apparent Times of the Eclipſes of *Jupiter*'s Satellites which will happen in *April*, 1764.
Barometrical

Barometrical Obſervations, made at *Stanton-Bury, Bucks.*

Poetry.

A Song ſet to Muſic.
To *Belinda.*
An Ænigma.
A Tranſlation of the *French* Lines in our Magazine for *February.*
An Epitaph in a Country Church-yard.
An Epitaph on Dr. *King*, late Principal of St. *Mary Hall, Oxford, Latin* and *Engliſh.*
A candid Review of 33 new Books.
A Chronological Memoir of Occurrences.

This Number is illuſtrated with four Copper-plate Prints, viz. 1. The Subdiviſion of Mathematical Inſtruments. 2. Wheel Carriages. 3, and 4. *Egyptian* Mummies, &c.

N°. IV. for *April*, 1764, contains,

LIFE of *Maria Sybilla Merian.*
Transformation of Inſects.
Of Conjugal Love. — A remarkable Account of a *Genoeſe* Nobleman and his Lady.
On the laws of *England*; — Caſe of legacies bequeathed by Will, — Queries and Opinions thereon: — Whether a Member of Parliament can be made a Bankrupt: — Poor laws: — Extract from the acts of the 4th of George III.
The art of dying in Silk, by M. *Macquer.*
The *German* ſilvering Powder.
Mr. *Graham*'s ſector for comparative Obſervations.
On the Diſſolution of Sulphur in Spirit of Wine.
Life of the Abbé *de la Caille.* — His Admiſſion into the Royal Academy of Science. — His Voyage to the *Cape of Good Hope.* — Obſerves the Planets and 10,000 Stars there. — Meaſures the Quantity of a Degree of the Meridian. — Returns to *Paris.* — Dies.
Of the Cauſe and Cure of Smut in Wheat.
Of planting Willow Trunchions, Magazan Beans, &c.
Remedy for the White Scour in Sheep.
Manner of making Sal Armoniac in Egypt.
Proceſs for making Sal Mirabile.
Dr. *Hales* on preſerving Health in hot Climates.
Obſervations of the late great Solar Eclipſe.
Letter to the Author of the GENERAL MAGAZINE.
Mathematical Queſtions anſwered.
New Queſtions to be anſwered.
Apparent Times of the Eclipſes of *Jupiter*'s Satellites, which will happen in *May*, 1764.
Barometrical Obſervations, made at *Stanton-Bury, Bucks.*

Poetry.

On a terrible Hail-ſtorm.
Epitaph on a Squirrel, in the *Lapidarian* Style.
An Ænigma.
A Rebus.
Anſwer to the Ænigma and Rebus in *February* Magazine.
Two Songs.
To a Friend. By Mr. *Shenſtone.*
The Chaplain.
An Extempore on the Biſhop of *Oſnaburgh*, by a Lady.
A Candid Review of 15 new Books.
A Chronological Memoir of Occurrences.

This Number is illuſtrated with the following Copper-plate Prints; 1. The Ananas or Pine-apple of *Surinam*, and the Kakerlac, an inſect which feeds upon it. 2. Mr. *Graham*'s Sector, for comparative Obſervations. 3. A fine Print of the marble Statue of his Majeſty, as erected at the *Royal Exchange.*

N°. V. for *May*, 1764, contains,

LETTER concerning the Ruins of *Palmyra* and *Balbec.* — *Longinus* probably the Architect of the *Palmyrene* Temple of the Sun. — That Temple decorated chiefly with *Corinthian* Pillars. — Effect of immoderate Wealth on Families and Nations. — *Balbec* ſituated in one of the moſt fertile and beautiful Spots of *Syria.* — Deſcription of the Temples.
Deſcription of the Ananas when ripe, and of Inſects found on it.
The Hail-ſtorm of *April* 26, 1764, compared with former ones. — Hail-ſtones of an incredible Size.
On the going back of the Shadow on a Sun-dial. — Propoſitions and Corollaries concerning it. — Time and Quantity of it calculated in all Caſes.
Of the Value and Uſe of Medals.
On the Laws of *England*, continued from our laſt Number.
Abſtract of the Acts relating to Buildings, Infants, Affidavits, Fiſhery, Apprentices, Proviſions, Oaths, Chancery, Bankrupts, Plantations, Hackney Coaches, Papiſts, and *Weſtminſter* Pavements.
Anecdote concerning Lord Chancellor *Clarendon.*

Obſervations

Obſervations on the three Kingdoms of Nature, by Dr. *Linnæus*.
A true and pathetic *Spaniſh* Story.
Mr. *Folkes*'s Table of the Standard of our Silver Money.
Deſcription of an extraordinary Bridge in *Wales*.
Mathematical Queſtions anſwered.
New ones propoſed to be anſwered.
Aſtronomical Admonitions for *June*.
Poetry.
May Eve's Invitation.
To a Friend.
Love's Original.
Love's Definition.
A Rebus.
A Rebus by Mr. *Sadler*.
Another Rebus by Mr. *Sadler*.
Anſwer to the Rebus in *April* Magazine.
Anſwers to the ſame by Mr. J. W. and Mr. Iſaac Dalby.
Notices to our Correſpondents.
A Candid Review of 11 new Book.
A Chronological Memoir of Occurrences.

This Number is illuſtrated with perſpective Views of the Ruins of *Palmyra* and *Balbec*, and the ſecond Plate of the Ananas, when ripe.

N°. VI. for *June*, 1764, contains,

THE Deſcription and Uſe of Mr. *Short*'s Equatoreal Inſtrument.
Of the Preſervation of Pictures painted in Oil. — How to preſerve Miniature Paintings; and Crayon Paintings.
Obſervations on the *Animal Kingdom*, by Dr. LINNÆUS. — Utility and Miſchiefs of Inſects: — Curious Properties of Inſects.
Preparation of Ivory for a Ground for Miniature Painting.
Of the *little Zurſac*.
Of Good and Beauty. — Conſiſt in Proportion, Symmetry, and Harmony.
Of the Principle of Coheſion in Bodies, with a View to Medicine. — Propoſal for preventing or curing the Scurvy. —— An expeditious Way of diſſolving Camphor and reſinous ſubſtances in Water.
A ſpecimen of ancient *Welſh* Poetry.
On the Laws of *England*. — Precedency at Funerals. — Proceedings againſt Peers and Members of Parliament. — *Burn*'s Poor Laws. — Caſe for the Lawyers anſwered. — Hon. Mr. *Yorke*'s Opinion touching Lord *Clive*'s Jaghire.
The natural and acquired Endowments neceſſary for a Lawyer.
Trial of Major General *Monckton*.
Remedy for a Whooping Cough.
Boerhaave and *Oſterdyke*'s Regimen for the Gout.
Remedy for a Sprain.
Of blood-letting.
Of Made Wines. — A Receipt for making Mead and Honey Wine. — To make Currant Wine.
Uſeful Hints and Obſervations for the Improvement of Agriculture. — Remedy for blown or hoved Cattle. — New Method of drying Hops. — Beſt Method of fatting Pigs. — Cragg as a Manure. — To cure the Tick or Sheep Lice. — Obſervations on Timothy-graſs. — To cure the *Yellows* in Black-cattle. — Remedy for the Scab in Sheep. — Way of feeding Sheep with Turneps.
The Benefit of Salt to Cattle.
Deſcription of a Coal-waggon.
Letter from Sir *George Yonge* to Mr. *Northcote*.
Letter from the *Spaniſh* General to the Commanding Officer at *Honduras*.
Order of Don *Joſeph Roſado*.
Petition to Governor *Littleton*.
Mathematical Queſtions anſwered.
New Queſtions to be anſwered.
Barometrical Obſervations.
Poetry.
On Conjugal Love.
A new Song ſet to Muſic.
To Mr. *John Sykes* of *Liverpool*.
An irregular Ode.
Mr. *Victor*'s Ode on his Majeſty's Birth-day.
Another, ſung at *Marybone Gardens*.
A Rebus.
The Ladies Library.
A Candid Review of 19 new Books.
A Chronological Memoir of Occurrences.

This Number is illuſtrated with three Copper-plates, viz. 1. Mr. *Short*'s Equatoreal Inſtrument. 2. The little *Zurſac*, with the Inſect found on it. And, 3. A Coal Waggon, as deſigned by Mr. *John Buddle*.

As long as chequ'd Variety ſhall pleaſe,
And labour'd Science wear the Dreſs of Eaſe;
While Nature, Arts, and Morals all unite,
Be ours the Taſk to profit and delight.

The GENERAL MAGAZINE,
For JANUARY, 1764.

Of Astronomical Zenith Sectors.

As long ago as the Year 1669, Dr. *Robert Hooke* attempted to prove the Earth's annual Motion round the Sun by aſtronomical Obſervations: And for this Purpoſe he made uſe of a Teleſcope of thirty-ſix Feet focal Length, furniſhed with a Micrometer for meaſuring minute Angles in the Heavens, and with Plumb-Lines for aſcertaining its Poſition. This Inſtrument, which appears to be the firſt of the Kind we are now treating of, he ſet up with a proper Apparatus, at his Apartments in Greſham College, London; and directed it ſo as to obſerve with it at what Diſtance the bright Star of the ſecond Magnitude in the Head of the Conſtellation of the *Dragon*, marked γ in *Bayer*'s Maps, paſſed the Meridian from his Zenith, at different Times of the Year: which Star extremely ſuited his Deſign, being ſo very near the Vertex of his Obſervatory as to be quite clear of Refraction, and alſo not above 15 Degrees from the Pole of the Ecliptic. For a more particular Deſcription of this Inſtrument, and his Way of uſing it, the firſt Number of the Doctor's *Cutlerian Lectures* may be conſulted, where a Print of it will be found, and the Obſervations made with it are recited.

Other Zenith Sectors were afterwards conſtructed and made uſe of by the French Mathematicians for finding the Quantity of the Celeſtial Arch between the Vertexes of different Places, in their ſeveral Operations for determining the Magnitude and Figure of the Earth; one of which, of 10 Feet Radius, is deſcribed by M. *Picard* in his *Meſure de la Terre*, another by M. *Caſſini*, of the ſame Dimenſions, in his Treatiſe *De la Grandeur et de la Figure de la Terre*.

Samuel

Samuel Molineux, Eſq; F. R. S. in hopes of verifying Dr. *Hooke*'s Obſervations, which ſeemed to be attended with Circumſtances that promiſed greater Exactneſs in them, than could be expected in any other that had been made and publiſhed on the ſame Account, and in order to determine the annual Parallax of the fixt Stars, choſe, in a great Meaſure, to follow the Method which the Doctor had choſen: For he made Choice of the ſame Star, and his Inſtrument was conſtructed upon almoſt the ſame Principles; but if it had not greatly exceeded it in Exactneſs, we might have ſtill remained in great Uncertainty as to the Parallax. This indeed was chiefly owing to that excellent and curious Mechanic Mr. *George Graham*, F. R. S. to whom the Lovers of Aſtronomy are alſo not a little indebted for ſeveral other exact and well contrived Inſtruments, which we ſhall hereafter deſcribe.

The Succeſs then of this Experiment evidently depending on the Accuracy of the Inſtrument, that was principally taken Care of.

To give a general Idea of Mr. *Molineux*'s Inſtrument, ſuch at leaſt as may ſatisfy the Readers Curioſity till we come, by and by, to an accurate Deſcription of another conſtructed by the ſame Artiſt; let it ſuffice to ſay, that the Teleſcope of $24\frac{1}{4}$ Feet focal Length, was ſuſpended in a vertical Poſition by two poliſhed Cylinders fixed horizontally to the Tube near the Top of it, ſo that their common Axis, if produced through the Tube, would paſs at right Angles to its Axis, through a Point near the Center of the Object Glaſs. When the Teleſcope was turned upon theſe Cylinders, its Axis of Viſion, or Line of Collimation moved, like a Pendulum, in the Plane of the Meridian; while a fine long Silver-Wire, hanging over the Center of one of the Cylinders, deſcended by the Side of the Tube, being ſtretched by a Plummet as heavy as it could well bear without breaking, immerſed in a Veſſel of Water, deſigned to retard its Vibrations, and bring it the ſooner to reſt. The lower End of this Wire played gently againſt the ſmooth Side of a ſlender Braſs Plate fixed tranſverſly to the Side of the Tube, ſo as to point Northwards and Southwards; and in the Middle of this Plate was punched a very fine round Hole, rather broader than the Thickneſs of the Wire. The Teleſcope was gradually

moved

moved upon its Axis of Suſpenſion, by the Preſſure of a long Skrew in the Direction of the ſmooth Side of the ſlender Braſs Plate; the Skrew worked in the Perforation of a Plate fixed to the Wall of the Obſervatory, and the Tube was made to bear againſt the pointed End of the Skrew by a ſmall Weight fixed to the End of a String paſſing over a Pulley, and having its other End tied to a Hook fixed in the Side of the Tube. The oppoſite End of the long Skrew was fixed, like an Axis, in the Centre of a Braſs Wheel, or counting Plate, whoſe Circumference was divided into a convenient Number of equal Parts, a fixed Index pointing to the Diviſions of the Wheel.

Things being thus prepared, while the counting Wheel was gently turned, the Part of the Wire near the round punched Hole, which played againſt the tranſverſe Plate, was viewed thro' a double Microſcope, till the little Hole in it appeared to be biſected truly by the Plumb-wire. The Teleſcope being thus rectified immediately before the Beginning of every Obſervation of γ *Draconis* (which paſſed very near the Zenith of the preſent Princeſs Dowager's Palace at *Kew* where the Inſtrument was erected) and the Diviſion of the Wheel againſt the Index being then noted, the Wheel was turned again, till the Interſection of the Wires in the Focus of the Teleſcope was brought to touch the Star at the Inſtant of its Tranſit. Then, by the Number of the Revolutions of the Wheel and the Parts of a Revolution that had paſſed by the fixt Index, the angular Motion of the Axis of the Teleſcope was eaſily collected, from a proper Table of Minutes and Seconds anſwering to thoſe Revolutions. Now the Differences of theſe Angles found at different Obſervations, were the Differences of the Star's Declinations: And the Inſtrument being rectified every Time, as above, it is eaſy to underſtand, that theſe angular Differences could not be altered by any warping, ſhrinking or ſwelling of the Materials of the Inſtrument. Mr. *Graham*, who often came over to *Kew* and examined it, declared, that he could perceive a ſenſible Alteration in moving the graduated Skrew plate, though leſs than to an Angle of $\frac{1}{6}$ of a ſingle Second, and that the Inſtrument might be adjuſted ſurely to leſs than half a Second—How amazing this!

The Apparatus was compleated, and fitted for obſerving about the End of *November* 1725, and on the third of *Decem-*

ber following, γ was for the firſt Time obſerved as it paſſed near the Zenith. The Rev. Dr. *Bradley*, then *Savilian* Profeſſor of Aſtronomy and late Aſtronomer Royal, all along aſſiſted Mr. *Molineux* in his noble Deſign, and continued the like Obſervations after his Death, at *Wanſted* with a Sector of his own, made alſo by the ſame Mr. *Graham*; during which Space he met with ſeveral new and, at firſt, ſurprizing Phænomena that attended them, tho, he in due Time, thro' his great Sagacity diſcovered the true Cauſe of them, and thereby laid open to all future Aſtronomers the nobleſt Diſcovery of the preſent Century, and alſo ſome admirable Conſequences relating to the Propagation of Light, which it is not our Buſineſs at preſent to enlarge upon.

Mr. *Molineux*'s Inſtrument being originally deſigned for obſerving γ *Draconis*, in order to try whether it had any ſenſible Parallax, was ſo contrived as to be capable of but little Alteration in its Direction, not above ſeven or eight Minutes of a Degree; and there being few Stars within half that Diſtance from the Zenith of *Kew*, bright enough to be well obſerved, he could not, with his Inſtrument, thoroughly examine how Stars differently ſituated, with Reſpect to the Equinoctial and Solſtitial Points of the Ecliptic, were affected; Dr. *Bradley* determined upon ſetting up an Inſtrument, that having it always at Hand, he might with more Eaſe and Certainty enquire into the Laws of thoſe perplexing Motions which had been obſerved at *Kew*. The Conſideration likewiſe of being able, by another Inſtrument, to confirm the Obſervations hitherto made with Mr. *Molineux*'s, was no ſmall Inducement to him; but the chief of all was, the Opportunity he ſhould thereby have of trying, in what Manner other Stars were affected by the ſame Cauſe, whatever it was.

The Teleſcope of this Inſtrument was no more than 12½ Feet in focal Length, the Doctor judging from the Experience he already had, that this Radius would be long enough to adjuſt it to a ſufficient Degree of Exactneſs; nor had he any Reaſon afterwards to change his Opinion, but, on the Contrary, was ſatisfied, that when it was carefully rectified, its Situation might be depended upon to half a Second.

The ſectorial Arch of this Inſtrument extended to about 6¼ Degrees on each Side the Zenith, whereby was procured an Oppor-

Opportunity of making choice of ſeveral Stars, very different both in Magnitude and Situation, and among them *Capella*, of the firſt Magnitude.

The Diviſions or Points on the Limb of the Sector were placed five Minutes of a Degree from each other, and numbered ſo as to ſhew the Polar Diſtances nearly; the true polar Diſtance exceeding that ſhewn by the Inſtrument, about $1' 35''$. When he firſt began to obſerve, he generally made uſe of that Point on the Limb which was neareſt to the Star's Polar Diſtance, without regarding whether it was more northerly or more ſoutherly than the Star: but, as it happened ſometimes, that the original Point, with which he at firſt compared the Star, became, in proceſs of Time pretty remote from it; he afterwards brought the Plummet to another Point that was nearer to it; and carefully examined, what Number of Revolutions and Parts of the Skrew of the Micrometer correſponded to the Diſtance between the different Points he had made uſe of; by which Means he was able to reduce all the Obſervations of the ſame Star to the ſame Point, without ſuppoſing the ſeveral Diviſions to be accurately five Minutes aſunder.

Such is the whole Account Dr. *Bradley* has given of Mr. *Molineux*'s Inſtrument and his own, and of the Way of uſing them; It is pity he never favoured his aſtronomical Brethren with a more particular Deſcription, as he once intended to do, and for which Purpoſe very accurate and elegant Drawings had been made by the late ingenious Mr. *Iſaac Whood*, of that which was erected at *Kew*. Take the Reaſon of this Omiſſion in his own Words.

" The Gentlemen of the *Royal Academy of Sciences*, to whom " we are ſo highly obliged for their exact Admeaſurement of the " Quantity of a Degree under the Arctic Circle, have already " given the World very convincing Proofs of Mr. *Graham*'s " Care and Abilities, *(in conſtructing aſtronomical Inſtruments,)* " and the particular Delineation, which they have lately pub- " liſhed of the ſeveral Parts of their Sector, which he made for " them, hath now rendered it needleſs to enter upon any minute " Deſcription of mine at *Wanſted*; both being conſtructed " upon the ſame Principles, and differing in their component " Parts, chiefly on Account of the different Purpoſes for which

" they were intended." —— To which Inſtrument, therefore, we now proceed, obſerving only, that Dr. *Bradley*'s Inſtrument was erected at *Wanſted* in 1727, and remained there till 1747, after which it was ſet up at the Royal Obſervatory at *Greenwich*, and is ſtill there.

That which is properly called the Sector, in this Inſtrument, is a Teleſcope D N (*Fig.* 1.) to which is fixed a Limb, or Portion of a Circle, T V, whoſe Radius is the Diſtance D G, being the ſame as that of the Object-glaſs from its Focus.

This Sector is ſupported by another immoveable Sector (*Fig.* 2.) concentric to it, in the Plane of which it is moveable, by turning upon the Axis which paſſes through the Centers of both Sectors.

The ſecond Sector is ſupported by a Tripod of the Figure of a truncated Pyramid, made of Wood firmly framed together; each Leg whereof may be raiſed or let down by Skrews, to bring the whole Inſtrument into an erect Poſition, and may be eaſily conceived without a Cut, which muſt be inconveniently large to repreſent every Part diſtinctly and in due Proportion.

Fig. 1. repreſents the true Sector in Perſpective, in all its Proportions; and *Fig.* 3. ſhews the principal Parts of it in a larger Size by a geometrical Elevation; the Letters refer to the 1ſt and 2d *Figures*, but it was not poſſible to place upon the 1ſt all thoſe which are upon the 2d.

D N (*Fig.* 2. and 3.) is a cylindrical Tube 9 Feet long, made of three Portions of plate Braſs firmly ſkrewed together. The two firſt D E, F G, are three Inches diameter, the Extremities whereof have cylindrical Ferrils; the third, N, in which is placed the Eye-glaſs, is but an Inch and a Half Diameter.

The Ferril D, which fortifies the Teleſcope at its upper Extremity, contains the Object-glaſs. Within this Ferril there is a round Cell in which the Object-glaſs is ſet faſt, being preſſed down by a Skrew-ring. The Ferril D has two Braſs Cylinders or Trunnions A, B, diametrically oppoſite, the Axis of which is exactly perpendicular to that of the Teleſcope. The Uſe of theſe Trunnions is to ſuſpend the Teleſcope, ſo as that when it is unfixed it may oſcillate like a Pendulum. The Trunnion A carries a Cylinder of tempered Steel three Quarters of a Line Diameter, which little Cylinder has the ſame Axis as the Trunnions

nions A, B, and is turned very ſlender towards its Extremity C, ſo as to repreſent two oppoſite Cones meeting in their Vertexes, thereby forming a round Notch for receiving the Loop of a Plumb-wire, whoſe Uſe we ſhall ſee hereafter.

The Ferril E at the lower End of this firſt Part, and the Ferril F at the upper End of the middle Part, are firmly ſkrewed together by circular Shoulders.

The Ferril G, at the Bottom of the Middle Part of the Tube, carries a Plane Speculum K of poliſhed Steel, which is preſerved from Injury by a Braſs Cover L when the Inſtrument is not uſed. It is by the Means of this Speculum that the Skrew of the Micrometer brings the Teleſcope to ſuch an Inclination as the Obſervations require. On the Cover L is drawn an horizontal Line ſerving to ſhew at what Height the Point of the Skrew of the Micrometer ſhould ſtand; ſo that before uncovering the Speculum the Micrometer muſt be raiſed or lowered till the Point of its Skrew is preciſely on the Mark drawn acroſs the Cover.

The Inſide of the Ferril G is turned in the Form of a circular Cell; which Cell receives a circular Ring exactly of the ſame Diameter. The Poſition of this Ring in the Cell is determined by two Pins diametrically oppoſite, fixed to the Cell, which enter two ſmall Holes drilled in the Ring. Laſtly the Ring is fixed faſt in the Cell by four Skrews. This Ring is placed exactly in the Focus of the Object-glaſs; it is perforated to an Aperture of about two Inches Diameter, and carries two very fine Silver Wires which croſs at right Angles, and are perpendicular to the Axis of the Teleſcope, in which they interſect. One of theſe Wires is parallel to the Axis of the Trunnions A, B. The Poſition of the Wires on the Ring is invariable; for the Ring has four Holes drilled in it, hardly larger than the Wires which paſs through them; one Extremity of each Wire is fixed in its Hole by a ſmall Skrew-pin, and the two other Extremities are drawn by Springs which keep them conſtantly well ſtretched, nothwithſtanding they ſhould be lengthened by Heat or ſhortened by Cold.

The ſame Ferril G is fixed perpendicularly on a ſquare Braſs Plate, which carries ſeveral Pieces, next to be explained.

1. A Braſs Piece M parallel to the Speculum S, under which it is placed. Againſt this bears the Point of a ſecond Skrew, whoſe

Uſe

Uſe is to put the Teleſcope in Motion before the firſt Skrew touches the Steel Speculum.

2. A plane Limb T V, perpendicular to the Axis of the Trunnions A, B, on which are drawn two Arcs of $5\frac{1}{2}$ Degrees, whoſe Centre is the Notch C, each divided into $7\frac{1}{2}$ Minutes by very fine Points; theſe Arcs ſerve to verify each other.

3. The ſmall Tube N which carries the Eye-glaſs, is fixed to the ſame Plate.

4. Laſtly this Plate carries two Rollers H, I, whoſe Uſe will be preſently explained.

Fig. 3. Repreſents the ſecond Sector, which carries the true Sector. *f g h o p q*, is a ſtrong Piece of ſeaſoned Mahogany, its Height 8 Feet 4 Inches, its Breadth *g h*, 9 Inches, its Thickneſs *f g*, $8\frac{3}{4}$ Inches. To its Top is fixed a ſtrong Braſs Plate which projects from the Wood about 5 Inches, and the projecting Part, which is notched for a Paſſage to the Teleſcope, carries two indented Cheeks *a*, *b*, for the Trunnions of the Teleſcope to ride on.

The Bottom of the Mahogany Beam is ſurrounded with a ſtrong braſs Fillet *o p q*, which carries a Limb *t u*, againſt the Face of which the Rollers H, I, of the Teleſcope bear.

i, *k*, are two braſs Pieces on which a Spirit Level may be placed for examining if the Beam ſtands in a vertical Poſition. *l*, *m*, *n*, are three Pieces of Wood, fixed to the Beam, on which reſt three Traverſes, connected with the three Legs of the Tripod, to keep the Beam from ſtirring: *r r* is a ſlight Frame fixed to the Beam, and carries a little Lamp for illuminating the Limb T V of the true Sector; under which Lamp is placed a Microſcope *ſ* for viewing diſtinctly the Points of the Diviſion on the Limb. The Lamp is raiſed or lowered by a Skrew *x* till the Microſcope points exactly to the Diviſion. By the Skrew *y*, and another oppoſite to it, the Lamp is moved to the Right and Left, and by the Skrew *z* it is brought nearer to, or further from the Limb, as Occaſion requires.

One of the above mentioned Traverſes carries a Pulley, over which paſſes a String which comes from the Teleſcope, and is charged with a Weight of a quarter of a Pound or ſomewhat more; its Uſe is to draw the Teleſcope towards the Micrometer.

The

The Micrometer is repreſented in *Fig.* 4. and 5. That which is properly named the Micrometer, is a male Skrew A B paſſing threw a female Skrew S, its Point B bearing againſt the little Speculum on the Teleſcope. This Skrew carries a counting Plate C divided into as many equal Parts as one Turn of the Skrew anſwers to Seconds of a Degree; and ſo ſhews how many Seconds the Teleſcope has advanced by the Turning of the Skrew.

On the Stem of the Skrew is fixed a toothed Pinion, which takes into a Wheel; which Wheel has a ſecond Pinion, which takes into a ſecond Wheel; which laſt Wheel makes one Turn whilſt the Skrew makes 25 Turns. Moreover, this laſt Wheel is itſelf a ſecond Counting-plate D, divided into 25 Parts, each of which is equal to a ſingle Turn of the Skrew; ſo that by Means of theſe two Counting-plates may be readily ſeen how many Turns and Parts of a Turn the Skrew has gone forwards or backwards.

The Wheels and the Counting-plate, which ſhews the Turns of the Skrew, are incloſed in a Box H I, ſcrewed on to the ſquare Piece M N, which ſquare Piece is fixed to another ſtrong Piece T V R Z which clips the Limb *t u* of the Beam by the two Claws T V, R Z; and by Means of two Skrews O, P, may be fixed to any Place of the Limb *t u*.

The ſquare Piece which the Box is ſkrewed to, has three Slits, the middle one of which is covered by the Plate on which reſts the Head of the Skrew G, which faſtens the ſquare Piece to the ſtrong Piece; the other two embrace the Buttons *m*, *n*; ſo that the ſquare Piece may ſlide on the Skrew G and on the Buttons *m*, *n*, and thereby raiſe or lower the Micrometer.

The Obſerver, when he uſes the Sector, is placed in a recumbent Poſture, on a kind of little Bench, which he can move backward or forward at Pleaſure, and raiſe or lower that Part of it on which the Back of his Head reſts, ſo as to bring his Eye to the Snout of the Teleſcope, and that without ſtirring off the Bench.

CONSTITU-

CONSTITUTIONAL HISTORY *of* ENGLAND.

Of the Nature and Origin of the Britiſh *Parliament.*

PARLIAMENT, *Parliamentum*, a grand Aſſembly or Convention of the three Eſtates of the Kingdom, *viz.* Lords Spiritual, Lords Temporal, and Commons, ſummoned to meet the King, to conſult of Matters relating to the Common Weal, and particularly to enact and repeal Laws. — The two Houſes of Parliament are ſtiled, the King's Grand Council.

'Till the Conqueſt, the Great Council, conſiſting of the great Men of the Kingdom, was called *Magnatum Conventus*. — The *Saxons*, in their own Tongue, called it *Wittenagemote*, *i. e.* Aſſembly of the Wiſe. — After the Conqueſt, about the Beginning of the Reign of King *Edward* I. and ſome Hiſtorians mention it as early as King *Henry* I. 'twas firſt called *Parliamentum*, *q. d. Speechment*, from the *French*, *Parler* to ſpeak. Tho' it ſtill only conſiſted of the Barons or great Men, 'till in the Reign of *Henry* III.

Polydore Virgil, *Hollingſhead*, *Speed*, and other Writers ſay, that the Commons were firſt ſummoned to a Parliament at *Saliſbury* in the 16th of *Henry* I. Sir *Walter Raleigh* places the Origin of Parliaments but two Years later. We think it unneceſſary to determine more preciſely concerning it: And we ſhall content ourſelves in ſaying, that whenever the Commons were taken in as one Branch of the Legiſlature, it was a glorious Addition to the others, and are a great Bulwark to the Liberty of the Subject, ſince the Laws there made are by the general Aſſent of the King and Realm.

The Power and Authority of Parliaments in making of Laws, in proceeding by Bills or otherwiſe, is ſo well known that we think it needleſs to ſay more of it in this Place. But perhaps it will not be unacceptable to our Readers, to premiſe ſomewhat concerning the original Creation of the Peers that compoſe the upper Houſe of Parliament, under their ſeveral Titles, eſpecially as that Houſe muſt be allowed to be ſuperior to the other both in Antiquity and Honour.

All the Degrees of Nobility are derived from the King, as the Fountain of Honour: The King's eldeſt Son is born Duke of *Cornwall*, afterwards he is created Prince of *Wales*; and to diſtinguiſh him, in the Middle of the Arch of his Coronet a Ball

and

A New Map of GREAT BRITAIN, IRELAND, and part of FRANCE.
England & Wales contain 52 Counties, and Scotland 33 Shires. Ireland contain 4 Provinces and 32 Counties.
THE ATLANTIC OCEAN
THE WESTERN ISLANDS
GERMAN OCEAN
IRISH SEA
ST. GEORGE'S CHANNEL
THE ENGLISH CHANNEL
ORKNEY ISLES
SHETLAND ISLES
British Statute Miles
Longitude from London
Engrav'd for the General Magazine, of Arts and Sciences; for W. Owen at Temple Bar 1764.

and Croſs are placed, as in the Royal Diadem. The Title of Prince of *Wales* was originally granted by *Edward* I. after his Conqueſt of that Principality, and all his Titles are, Prince of *Wales*, Duke of *Cornwall*, and Earl of *Cheſter*. — The firſt Duke we had in *England* was *Edward* the black Prince, ſo famous in our Hiſtories for his heroic Actions, who was created a Duke in the 11th Year of King *Edward* III. — Other Titles were afterwards created, as *Robert de Vere* was the firſt *Marquis*, created in the 8th Year of King *Richard* II. — *Hugh Lupus* made hereditary Earl of *Cheſter* by *William* the Conqueror. — *John Beaumont* the firſt Viſcount, created in the 18th Year of King *Henry* VI. — *John Beauchamp*, the firſt Baron, created by Patent the 11th of *Richard* II.

But in the ancient Records, the Word *Baron* included all the Nobility of *England*; becauſe, regularly, all Noblemen were Barons, though they had higher Titles beſides, according to the Charter of King *Edward* I. So that the Great Council of the Nobility, when they conſiſted altogether of Dukes, Marquiſſes, *&c.* beſides Earls and Barons, were all comprehended under the general Name of Barons. But, after all, a Baron holding Land of the King to him and his Heirs, is no Lord of Parliament 'till he be called by the King's Writ to Parliament: For in the Reign of *Edward* I. the Title of Baron, which was before common to all thoſe who held Land of the Crown, was confined to thoſe whom the King ſummoned to Parliament. Theſe Barons had given them two Enſigns, to remind them of their Duty; firſt, a long Robe of Scarlet, in reſpect whereof they are accounted in Law *De Magno Conſilio Regis*; and, ſecondly, were girt with a Sword, that they ſhould ever be ready to defend their King and Country.

And as Biſhops were always included with the temporal Nobility, ſo we find the Practice of ſending Proxies both for the Biſhops and Barons was very ancient, particularly in the Reign of *Edward* I. as alſo in a Parliament held at *Weſtminſter* under *Edward* II. for it was then common to bring eccleſiaſtical as well as civil Caſes before the Parliament: Though in the Reign of the *Norman* Kings we find little to our Purpoſe, *William* the Firſt ſummoned a national Synod to determine the Diſpute betwixt the Sees of *Canterbury* and *York* about Supremacy. — In the

Reign of *Henry* I. the Conqueror's youngeſt Son, Taxes were levied on the Subject in as arbitrary a Manner as in the two preceeding Reigns of his Brother *Ruſus* and his Father. In the ſixth Year of his Reign he ſet a Sum upon every Pariſh Church, and obliged the Incumbent to pay it. In the eighth Year he levied three Shillings upon every *Hide* of Land, for a Dowry for his Daughter, and other leſſer Taxes for his own Pleaſure: And we don't find that the King aſked the Conſent of his Barons or People, though there were ſome Conventions of the Eſtates of the Realm called in his Time. For in the Year 1106, ſays *Mathew Paris*, *Henry* convened his Nobles by a ſpecial Edict. And on a ſpecial Occaſion, his elder Brother *Robert*, whom he had diſpoſſeſſed of his Right of Succeſſion to the *Engliſh* Crown, came over from *Normandy* to make him a friendly Viſit. *Henry*, being jealous that this Viſit might turn to his Diſadvantage, called together the great Men of the Realm by his Royal Mandate, ſays *Mathew Paris*, to meet at *London*, where he firſt ſoftened and ſweetened them ſeparately, by ſmooth Words and Expreſſions, and then, being met together, he made a *Speech* to them; which Speech, as it is the firſt that came from the Crown, only preſerved by *Mathew Paris*, and taken Notice of by very few Hiſtorians either ancient or Modern, we thought might be acceptable to our Readers, *viz.*

KING HENRY I. SPEECH, *Anno Regni* 6, 1106.

" *My Friends and Faithful Subjects, both Foreigners and Natives,*

" You all know very well that my Brother *Robert* was both called of GOD, and elected King of *Jeruſalem*, which he might have happily governed, and how ſhamefully he refuſed that Rule; for which he juſtly deſerved GOD's Anger and Reproof. You know alſo, in many other Inſtances, his Pride and Brutality; becauſe he is a Man that Delights in War and Bloodſhed, he is impatient of Peace. I know that he thinks you a Parcel of contemptible Fellows: He calls you a Sett of Drunkards and Gluttons, whom he hopes to tread under his Feet. I truly, a King meek, humble, and peaceable, will preſerve and cheriſh you in your ancient Liberties and Privileges, which I have formerly ſworn to maintain: Will hearken to your wiſe Councils with Patience, and will govern you juſtly, after the Example of the

the beſt of Princes. If you deſire it, I will ſtrengthen this Promiſe with a written Charter, and all thoſe Laws which the holy King *Edward*, by the Inſpiration of GOD, ſo wiſely enacted, I will again ſwear to keep inviolably. If you, my Brethren, will ſtand by me faithfully, we ſhall eaſily repulſe the ſtrongeſt Efforts the cruelest Enemy can make againſt me and theſe Kingdoms. If I am only ſupported by the Valour and Power of the *Engliſh* Nation, all the weak Threats of the *Normans* will no longer ſeem formidable unto us."

AGRICULTURE.

Of EARTHS *with reſpect to the Growth of* PLANTS.

THOUGH Plants may be raiſed in pure Water, on Moſs or Spunges kept moiſt, it is nevertheleſs, in the Boſom of the Earth that Seeds are moſtly depoſited; they generally germinate in the Earth, and from the Earth ſhoot their Stems: So that of what Nature ſoever the nutritive Juices are, which Plants imbibe by their Roots, it is almoſt always from the Boſom of the Earth they extract them. This nutritive Juice is to be found in more or leſs Abundance in the different Earths from which it is collected with greater or leſs difficulty by the Roots: This induces us to conſider the ſeveral Kinds of Earth, as they are more or leſs ſuited to Vegetation according to their Degrees of Fertility. Thoſe which contain moſt nutritive Juice, and which are therefore moſt proper for Vegetation, are called Loams or Loamy Lands, or Mother Earth; the others are Clay, pure Sand, Marl, Chalk, *&c.*

Loams are divided into White, Brown and Ruſſet. The white Lands are the beſt for Wheat. They are not ſo white as Chalk, Marl, or Virgin Earth; they are termed white, becauſe when dry they have a whitiſh Aſpect.

The brown Loam, though a little inferior to that above-mentioned, is nevertheleſs, very good for Corn; even when dry, it in ſome Meaſure preſerves its Colour. It muſt not, on Account of its Colour, be confounded with a Soil of very bad Quality, which is very heavy when wet, and when dry has no Coherence,

The Ruſſet Loams are tolerable good for Wheat in wet Seaſons; but if the Seaſon is ever ſo little inclined to Drought, they become much inferior to the brown and white Loams; therefore they are generally reſerved for Meadows and artificial Paſtures, particularly Saintfoin. Theſe ruſſet Loams muſt not be confounded with the red Clay uſed in building Ovens.

All theſe Loams which are by Nature very fertile, ferment with Acids; if, when dry, they are moiſtened, they ſmell like Summer's Rain. They are eaſily broke by the Plow: And they muſt be very wet before they become poachy. If plowed when very wet, they are apt to knead; and when ever ſo little dried by the Sun form great Clods. But as ſoon as the Sun has well dried and hardened theſe Clods, the Rain eaſily penetrates them; a Fermentation enſues, bubbles of Air are formed in them, and they moulder like Lime: And in the End, the Earth being reduced to its firſt State of Culture, the Roots are at Liberty to extend to find Plenty of Nouriſhment. In very dry Weather, the Weight of Wheels reduces theſe Lands to duſt; but in the Fallows, the earthy Particles have ſtill ſo much Coherence as to prevent their being raiſed by the Wind, which is often the Caſe in light Lands, where the Roots of Plants are left bare. When theſe Lands have a proper Degree of Moiſture, they ſwell; they are more poachy than Sand, but leſs ſo than Clay: Of theſe three Kinds of Loam, it is the white that is with moſt difficulty reduced.

In waſhing theſe Earths may be obſerved a coarſe Sand, partly calcarious, partly vitrifiable; then a finer Sand, which ſeems to be moſtly vitrifiable; laſtly, a fine Mud, very different from the Clay, which may be extracted from rich Sands: This may be called ſlimy Earth; it is perhaps partly formed of decayed Vegetables, but we cannot venture to aſſert it. Acids diſſolve a Part of this Mud: when expoſed to the Fire, it generally aſſumes a red Colour, but does not bake like Clay, Part of it ſeems to yield to the Fire, and the reſt is reduced to Lime.

Clay, called alſo *Argil*, is, if the Expreſſion may be allowed, too earthy: It is very compact; but its Pores are ſo cloſe that Roots with great Difficulty penetrate it. It imbibes a certain Quantity of Water, which it retains; and when it is ſaturated,

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is no longer permeable to that Element; when it dries after being poachy, it becomes very hard and does not fall into Duſt.

As it retains the Water, all the Soils that are ſituated on a Bed of Clay, are moiſt; but as it only imbibes a certain Quantity of Water, it is always ſo compact that Roots enter it with Difficulty.

As poachy and kneaded Clay becomes very hard, it follows, that when plowed we find inſtead of being divided, it is made more compact.

Clay ſufficiently wetted, may be kneaded like Dough. It is ductile and ſhrinks in drying, ſo that its Parts adhere ſtrongly; whence it follows, that it is with great Difficulty penetrated by the Sun, Dews, and Roots.

Pure Clay does not viſibly yield to Acids; they act very ſlowly on it.

Fire bakes Clay to almoſt a Beginning of Vitrification; nay, ſometimes a ſtrong Fire melts and vitrifies it. Moſt Clays become red by being baked, on Account of the Iron they contain.

There are Clays of ſeveral Colours, which ſeem to depend on the Influence of metallic Subſtances; thoſe which are very vitriolic appear to be leaſt proper for Vegetation.

The Water which Clay retains only paſſes through Sand: Or rather Sand admits of Waters mixing with its Particles, though they are not penetrated by it: So that they only leave Spaces which afford Paſſages for the Water without retaining it; on this Account Sand ſoon dries.

Sands differ much, according to the Nature of the Particles which compoſe them, Some, through a Microſcope, appear like Fragments of Cryſtal; others, like Fragments of Flint; many reſemble ſmall Cryſtals, with great Tincture of Iron; and not a few conſiſt of ſmall Pieces of calcareous Stones, or Lime Stone; whence moſt Sands vitrify in the Fire, and ſome are calcined to Lime. Many of them muſt alſo reſiſt Acids, whilſt ſome yield to them, being of a calcareous Nature: Theſe laſt are Stones reduced into very ſmall Particles.

Water, in wetting Sand is ſo far from ſwelling it, as it does Clay and Loam, that it unites its Parts, gives it ſome Degree of Firmneſs, and leſſens its Volume.

Pure

Pure Sands permits Roots to extend, but of themſelves afford no nutrive Subſtance; they do not retain Water, unleſs, by frequent Rains, they are in a Manner overflowed: Very hot Weather deſtroys every Thing on them, and the ſooner as the Sand heats ſo much.

A Mixture of Clay with Sand makes what is called *Fat*, or *rich Sand*. This Soil is very proper for Trees, when it has a great Depth. In general, the fat Sand is very fertile but hard to work, particularly when the Clay predominates.

When Sand, with a great Mixture of Clay, is wet, it becomes very heavy, poachy, and ſticks to the Tools: when dry, it is very difficult to plow.

When the Sand predominates, it is much eaſier to work: It hardens leſs in dry Weather, and the Roots make an eaſier Way, being waſhed in a great deal of Water, than poured from one Veſſel into another, and leſt to ſettle it yields partly pure Sand, and the reſt almoſt as pure Clay.

Marl is an Earth in itſelf as barren as pure Sand, but mixed with other Earths, makes them as fruitful as the rich Sands.

Marls are of various Kinds; ſome are found on the Surface of the Earth, others at a conſiderable Depth. Some are hard, and, on coming out of the Pit, reſemble Shards; others have the Appearance of Clay; theſe feel doughy between the Fingers; many Kinds are not unlike Chalk; theſe the Countrymen call *Chalky Marl*. It is ſometimes found above the fat Marl. Some are very white, others greeniſh, of a Brick Colour or reddiſh brown, *&c.*

Marls are often mixed with other Subſtances. In ſome Marls there are many Shells; in others Sand. The Shell Marls are generally very good; the gravelly Kind are better or worſe, as they contain more or leſs Gravel, unleſs when they are ſpread on Clay Lands.

All Marls are not equally proper to enrich Lands; chalky Marls are quicker and more powerful in their Efforts; but their Virtue does not laſt ſo long as that of the fat Marls. There are gravelly Marls which are almoſt of the ſame Nature as virgin Earth. Theſe do more harm than good to Lands, unleſs they are very rich.

The

The following Characters may help to diſtinguiſh Marls from other Kinds of Earth.

1. On wetting Marl a little, it ſhould be unctuous, and fat to the touch.

2. In this State it is almoſt as doughy and ductile as Clay.

3. When Marl is expoſed to the Air it diſſolves and falls into Powder nearly as Lime does; this is not the Caſe with Clay.

4. It ſhould diſſolve in Water, and then its gravelly Parts ſink to the Bottom, and the true Marl lies over it in the Form of a white Mud or Slime. Neither Chalk nor Clay diſſolve thus.

5. Marl ferments with all Acids; but in Clay it is only extraneous Matter that can be affected by Acids.

6. When Marl is expoſed to a briſk Fire, it hardens a little, ſo as not to be eaſily diſſolved in Water; but it does not bake like, nor become Lime like Chalk. There are, nevertheleſs, ſome Sorts which calcine into Lime whilſt others are not difficult to vitrify.

7. Marl is an abſorbent Earth, and will, like others of the ſame Nature, take Spots of Greaſe out of Cloth.

8. Marl ſhould not have a vitriolic Taſte, but be inſipid, and have nearly the ſame Smell as good Loam. This Character diſtinguiſhes it from certain Earths which diſſolve like Marl, but are nevertheleſs not proper to enrich Lands. On this Account, good Marl ought rather to turn green with Syrup of Violets than red; for the bad Earth, of which we are ſpeaking, is a metallic and acidulous Marl.

It is well known that Marls at firſt render Lands leſs fertile, but after a Time enrich them much.

Chalk is more of the Nature of Stone than either Marl, or Crayon; it is a ſoft Stone, which Roots cannot penetrate, and does not ſeem to contain much Matter proper for Vegetation; on throwing a little Water on this Earth it is immediately imbibed, it becomes ſofter and more ſlipperly, but does not diſſolve. Nevertheleſs, when Chalk is cut by Hand to encreaſe the Surface of its Parts, the Rain, Sun, and Froſt, fail not to break it; and, with the Aſſiſtance of Dung, it becomes capable of nouriſhing ſome Sorts of Plants.

Some

Some Husbandmen affirm, that Chalk thus broke and spread on Land has the same Effect as Marl: but I have not tried it. Chalk is dissoluble by Acids, and, on being calcined, is reduced to Lime.

Turf or Peat, is a fat Earth. There are two Sorts: One is evidently composed of the decayed Parts of Vegetables soaked for a long Time in Water: the other also seems to be composed of the decayed Parts, but it is very bituminous: both of them burn, and deposit Ashes very much mixed with Earth, which the heat of the Turf has calcined. The bituminous Turf is least proper for Vegetation; that which is not so bituminous makes rich Earth, when it has been well plowed, and is not overflowed; but it is too light, probably it would be very good if it was mixed with Earth that was too stiff.

Virgin Earth is such as has never been stirred, lying lower than the plow goes. It is for the most Part hard and gravelly, being of a middle Nature betwixt Earth and Stone. It is of several Colours, particularly white and yellow.

This Kind of Earth may be diluted in Water, as Mortar is made of it; but when dry, it becomes very hard. It is by Nature improper for Vegetation; but by dint of plowing, and after it has been exposed to the Influence of the Frost, Sun, and Meteors, and also assisted by Manures, it may be made fruitful, insomuch, that the Earth which has been used for Mortar, and is taken from old Walls, makes good Manure.

By washing virgin Earth much calcarous Stone is found, and a Substance resembling Chalk. When spread on Land like Marl, it has not succeeded.

This, when it has been calcined and spread on Land, has not always answered the Intention immediately, but has made a more apparent Improvement in some Years.

The nutritive Juice of Plants would be to no Purpose deposited in the Bottom of the Earth; if the Plants were not able to collect it. There must be some Means for them to extend their Roots betwixt the Particles of Earth: A Soil too tough, compact, the Particles of which are too near each other, prevents them from doing it. It is then necessary that these Particles should have

have betwixt them certain Interſtices, through which the Roots may find a Paſſage.

Moſt Soils have naturally internal Pores; but they are generally either too ſmall, too numerous, or but ill adapted to the Roots.

If they are too ſmall, as in heavy Lands, few Roots can enter them: This is one of the greateſt Defects of Clay.

If, though large enough, their Number is ſmall, it will often happen that there is no Communication betwixt one Pore and another; and the Roots being ſtopped in their Progreſs, cannot extract a Nouriſhment neceſſary for the Plant: This is one of the Defects of too ſtrong Soils.

If the Interſtices are too bare, the Roots, paſſing them almoſt without touching the Earth, will receive no Benefit. This is a Defect peculiar to light Lands.

A ſufficient Tillage will in Part remove theſe Defects; for, in many Inſtances the Earth contains ſo great a Quantity of nutritive Juice, that there is no Danger of exhauſting it. It is then only neceſſary to aſſiſt the Roots to enable them to reap the Benefit of it. There is ſtill leſs Reaſon to apprehend this Nouriſhment will diſperſe of itſelf, Experience proves it will not. Let Earth be dried, pulverized, expoſed to the Sun, Rain, and Froſt, it will become only more fruitful.

It is certain that Water ſhould diſſolve the Parts deſtined to nouriſh Plants; and that Vehicle is in a great meaſure diſperſed by Tranſpiration, after it has depoſited in the Plants what was to be converted into their Subſtance. But when Water evaporates from the Earth without paſſing through Plants, it carries with it none of theſe nutritive Particles; ſince, as we remarked, Lands left in the State of reſt, inſtead of being impoveriſhed became more fertile.

Beſides, Experience convinces us, that the Surface of the Earth, which is moſt frequently ſtirred, and moſt expoſed to this dreaded Evaporation, is always moſt fertile.

Thence it follows, that to encreaſe the Fertility of Land, it is not only neceſſary to furniſh it with Matter proper for the Nouriſhment of Plants, but it muſt be ſo managed that the Plants may with their Roots be able to collect that Nouriſhment

which almoſt every Kind of Land abounds with: For this Purpoſe, it is neceſſary ſo to divide the Particles of the Earth, that there may be betwixt them an infinite Number of ſmall Spaces, through which the Roots may inſinuate themſelves; ſo that being in immediate Contract with the Particles of the Earth, they may imbibe the nutritive Juices. This Diviſion of Parts may be effected by Plowing and Manures, as we ſhall hereafter explain.

Earth alone would not be ſufficient for Plants; Water is ſtill more neceſſary to them. If this Help is wanting, they betray a viſible Inanition; their Leaves wither, dry, and fall. Theſe Symptoms ſhew that they either want Water, or that their Tranſpiration is too abundant. Theſe Defects may be removed by mixing ſtrong Earth, or even Clay, or rich Manures, with Soils that are too light, in order to make them retain the Water which paſſes too quickly through ſuch poor Lands.

But as in one Caſe the Want of Water cauſes an Inanition in Plants, on the other Hand, too much of it cauſe other Diſorders: the Leaves, though green and thick, fall from the Trees; the taſtleſs Fruit rots before it comes to Maturity; and the Symptoms of this Kind of Plethory encreaſes in Proportion to the Decreaſe of the Tranſpiration; the Shoots, remaining green and herbaceous, periſh in the Winter; or at leaſt the Motion of the Sap being too ſlow, the Juices become corrupted, and the Plants rot. This may be remedied by Ditches to carry off the Water; or by carrying Sand on Land that is too ſtrong to give it a Degree of Lightneſs, or by Drains made in the Land itſelf by which the ſuperfluous Water may run off.

Woodlands, Heaths, and Waſtes, are often propoſed to be ſowed; theſe ſeveral Kinds of Land require different Methods to put them into a Condition of producing Corn. Some muſt be ſtoned, others drained. We ſhall collect thoſe Objects into one Point of View, when we ſpeak of breaking up Lands; every Thing that relates to the Preparation of Land will be there found.

The LIFE *of* JAMES CASSINI.

JAMES CASSINI, Son of the celebrated Aſtronomer *John Dominic Caſſini*,* was born at *Paris*, *Feb.* 18, 1677, N. S.

His domeſtic Tutor was M. *de Chazelles* of the Academy, who afterwards travelled into the Eaſt, and brought back the Poſition of ſeveral Places of Note, determined by aſtronomical Obſervations. M. *Caſſini* was ſent to the *College Mazarin* to ſtudy Philoſophy, when the Abbé *Varignon* was Profeſſor of Mathematics there; under whoſe Tuition he made ſo quick a Progreſs, that at 15 he maintained, with much Reputation, a mathematical Theſis, afterwards printed, and dedicated to the Duke of *Burgundy*, which procured him, a few Years after, the Patronage of his Highneſs's only Son.

He was admitted Member of the *Royal Academy of Sciences* in 1694: The ſame Year he accompanied his Father in a Tour to *Italy*, as his Aſſiſtant in the Verification of the famous Meridian in the Church of St. *Petronio*; took the Meaſures of the *Roman* and *Grecian* Foot in the Capitol, and obſerved the Latitudes of ſeveral Places he paſſed through. He made the like Obſervations in *Holland* on his Return to *France*.

In 1696, he came over to *England*; where he viſited Sir *Iſaac Newton*, Doctors *Wallis*, *Gregory*, *Halley*, *Sloane*, and Mr. *Flamſteed* the Aſtronomer Royal; and was elected a Fellow of the *Royal Society* of *London* ſoon after his Departure.

Above a hundred and fifty Pieces of this Gentleman's have appeared in the Memoires of the *Pariſian* Academy of Sciences, moſt of them of conſiderable Note, and greatly conducing to the Advancement of Science, particularly of Aſtronomy; a few of which we ſhall ſuccinctly ſpeak of.

A Method of determining the Difference of Longitude of Places, from Obſervations of Occultations of the Planets and fixed Stars by the Moon, by the Means of ſpherical Projections, and that to as much Certainty as by the Eclipſes of the Satellites of *Jupiter*.

A Critique on certain Obſervations of Mr *Flamſteed*, Regius Profeſſor of Aſtronomy at *Greenwich*; from whence that Aſtronomer, for want of a Knowledge of the Aberration diſcovered

* See his Life, Page 301, in *General Magazine*, *April*, 1761.

by Dr. *Bradley*,* had aſſerted an annual Parallax of the fixed Stars.

A Memoire on the Inclination of the Orbits of Satellites in general, and eſpecially of thoſe of the Satellites and the Ring of *Saturn*; the Theory of which he has laid down in a demonſtrative Way.

A Memoire on the Libration of the Moon, wherein he attempts to aſſign the Cauſe of that Motion; which *Riccioli* and M. *de Mairan* would aſcribe partly to a real Cauſe. M. *Caſſini*, however, points out a Method of diſtinguiſhing and determining what Part of it is purely optical.

M. *Caſſini*'s Father, from two Obſervations made in 1662 and 1667, had concluded the Time of the Rotation of the Planet *Venus* about her Axis, to be about three and twenty Hours. In 1729 M. *Bianchini* publiſhed a Work entitled, *Heſperi et Phoſphori Phænomena nova*, in which he undertakes to prove, that the Period of the Rotation in Queſtion is no leſs than twenty four Days and a third of a Day. M. *Caſſini*, in 1732, fell upon an Expedient for reconciling theſe two Determinations, or rather the Obſervations on which they were founded. The Solution of this Difficulty turns upon a Circumſtance of M. *Bianchini*'s Obſervation, which it ſeems had been interrupted for about three Hours; during which our Aſtronomer maintains that the Spots which *Bianchini* had firſt obſerved, might have very probably diſappeared through the Effect of a twenty-three Hours Rotation, and been replaced, after three Hours, by others not very unlike them.

In 1740 he publiſhed his *Elements of Aſtronomy*, and a Set of new Tables conformable thereto, with their *Præcepta Calculi*. A Work every Way worthy of himſelf.

Aſtronomy, however, though the principal, was not the ſole Occupation of M. *Caſſini*. In 1669 M. *Picard* meaſured ſomewhat more than a Degree of Latitude to the North of *Paris*; but as that Space ſeemed rather too ſmall for determining the Quantity of the Earth's Circumference to a ſufficient Degree of Accuracy, the King ordered that the Meaſurement ſhould be executed through the whole Extent of the Kingdom, along the Me-

* See the firſt Paper in this Number, concerning *Aſtronomical Zenith Sectors*.

Meridian of *Paris*. The Particulars of these Operations, in which M. *Cassini* had the main Direction, were published, as an Appendix to the *Memoires de l' Academie Royale des Sciences*, for the Year 1718.

When M. *Cassini* was very near Seventy, he demanded, as a Member of the Academy, the Privilege of Superannuation (*Veterance*), which, though allowed him, he was no less assiduous in exerting his Talents for the Promotion of Knowledge, than in his earlier Years; never neglecting an Opportunity of a serene Sky, when any interesting Observation could be taken.

He had several honourable Posts conferred on him by the King, the most profitable, that of *Mâitre des Comptes* which he held from 1704 to the Day of his Death, *April* 15, 1756, which happened through an Accident of being overturned in his Post-chaise, going to his Country Seat at *Thury*.

The Natural History of Dumfries-shire.

THIS County contains *Annandale*, *Nidisdale*, and *Wachopdale*: It is bounded on the West with *Galloway* and *Kyle*; on the East with *Solway Firth* and Part of *Northumberland*; on the North with Part of *Clediſdale*, *Tweedale*, and *Teviotdale*; and on the South by the *Iriſh Sea*: It is about 50 Miles from East to South West.*

The Air of this County is not altogether so healthful as in many other Parts of *Scotland*, as much of it is low, marshy Land, but the Soil produces very good Pasture; so that they breed a great Plenty of Black Cattle and Sheep, and the Hills which surround it are fruitful in Corn.

Annandale is distinguished as the most pleasant and fruitful Part of the Shire: It lies in the eastern Part, in a strait Line from *Nidisdale* on the West, to *Eskdale* on the East, about 24 Miles in Length and 14 in Breadth. The River *Annan*, which runs through the Middle of this Shire, falls into the *Solway Firth*, after a Course of 27 Miles.

Annan is the chief Town upon this River, which, being a Sea-port, and having a good Harbour, was once a Town of pretty

* For the Name, Situation, Extent, Division, &c. of *Scotland*, see the Geography of that Kingdom in the *General Magazine* for *August*, 1761.

pretty good Trade, but often taken by the *English*, who, at last, burnt it to the Ground in the Reign of *Edward* VI. and it has never been so large and flourishing a Town since. Here was a good Salmon Fishery, and a Trade to *Ireland* by the *Isle of Man*; but most of the Merchants, who carried on considerable Branches of Commerce, retired to *Dumfries*.

Dumfries, 15 Miles from *Annan*, and 64 from *Edinburg*, is the chief Town of this County, and indeed of the South Part of *Scotland*; for the Number of its Merchants, and the foreign Trade carried on there, it is sometimes compared to *Liverpool*. The Town stands on the River *Nid*, or *Nith*, has a stately Church and Castle, four principal Gates, and many good Streets. The Tide flows up the River about six Miles, and brings a Number of small Vessels close to its Kay: and at *Keltern*, about six Miles below it, the largest may ride securely. It has a large Market-place with a noble Cross, a Free-stone Bridge, over the River leading to *Galloway*, of thirteen Arches, the finest in *Great Britain* except *London*, *Westminster*, and *Rochester*; in the Middle of it there is a Gate, which separates the Shire of *Dumfries* from *Galloway*. There is a Street which leads from the Bridge, by an easy Ascent, to the Castle, which is on the East Side of the Town, and has an agreeable and extensive View of the adjacent Country: From the Castle a fine large Street descends to the Church, at half a Mile Distance, the Exchange and the Town-house are situated about the Middle of it; likewise a Tolbooth, or Prison. The Inhabitants of this Town have been often distinguished by their Zeal for the Protestant Interest. The Rebellion in 1715 and 1745, proving of no small Expence to them, some Privileges and Immunities have been granted as a Compensation, as the additional Duty on the Tonage of Shipping, and on Goods imported into the Ports of *Dumfries*: Their Markets and Fairs, are considerable. This Town gives the Title of Earl to the chief of the ancient Family of *Critchton*, and is the Seat of a Presbytery, which consists of eighteen Parishes. The Country around it is exceeding pleasant, adorned with many Gentlemen's Seats finely planted with Trees.———That called the Bridge End, on the West Side of the River, is a Regality, which belonged to the ancient Family of *Nithsdale*, before the forfeiture of it in the late Rebellion.

Beyond

Beyond the *Nith*, about a Mile and half from *Dumfries*, is the College of *Lincluden*, formerly a magnificent collegiate Church, as appears by ancient Models and by the Ruins of its curious Architecture.——Near this Place is a Bridge over the River *Cluden*, which River is remarkable for many Kinds of Fiſh, eſpecially Salmon: And here are ſeveral Cataracts called Salmon Leaps.——*Cluden Lake* is in the Neighbourhood of this Town, it is about a Mile in Length, and abounds in Fiſh; it ſometimes overflows and runs into the River *Nith*, which Fluctuation contributes to its Sweetneſs.

About 5 Miles from *Dumfries* is that remarkable Lake called *Lochyr*, 10 Miles long and 3 broad, which, beſides affording ſeveral Kinds of Fiſh, the Borders of it ſupply the Country with a very good Kind of Peat for firing.

Holywood, a little Town about three Miles from *Dumfries*, took its Name from a very large Wood abounding in various Kinds of Timber, but that, in proceſs of Time, is greatly diminiſhed, and the Town is now more noted for an ancient Church and Abbey.

Drumlanerk is a Market Town about 23 Miles from *Dumfries*, and gives a Title to the Duke of *Queenſbery*; but it is much more noted for a large, noble Palace, with 28 Turrets, grand Avenues, Gardens, and Terrace Walks, (and for a ſtately Stone Bridge over the River *Nith*,) 'tis a fine Square building of Free-ſtone; the hanging Gardens are cut out in this rocky Part of the Country, down to the River, with curious Water-Works, and many other expenſive Decorations.——At a ſmall Diſtance is *Queenſbery* Wood, about ſix Miles in Length.

Moffat, 21 Miles from *Annan*, on that River, is another ſmall Town noted for its remarkable medicinal Springs: There are two Wells which riſe near the Top of a great Rock, (from another Part of which iſſues the principal Stream of the River *Annan*): The upper Spring runs through whitiſh and cryſtaline Stones, and the lower through Black ones, reſembling the Marcaſites of Antimony: The Water ſmells like Gun-powder, and turns Silver black. A yellowiſh red Matter, like ſtinking Sulphur of Antimony, ſticks to the Stones of the upper Well:—— Thoſe of the lower Well are of the very Colour of Antimony, and ſome of them contain a metallic Matter that ſparkles like it.

Where

Where the Stream of the lower Well runs down into a neighbouring Brook, a whitiſh Salt ſticks to the Rock, with a Matter which probably is nitrous and has the diuretic Virtue of the Water; it purges like thoſe of *Scarborough*, and is very good againſt Cholic and nephritic Pains, by powerfully removing the Obſtructions of the Bowels: 'Tis applied outwardly for the Cure of Ulcers and diſpelling Pains in the Joints, and is obſerved to operate beſt in the dry Seaſons of Summer and Autumn, at which Times theſe Wells are much frequented, and probably might much more if there were Diverſions of different Kinds for the Amuſement of the Gentry, as there are at *Bath*.

Rivell, over againſt the *Engliſh* Borders, is noted for a Sea Sand, which, when boiled, produces a very good Kind of Salt, but it has a bitteriſh Flavour, for which ſome diſlike it; others think it of a more medicinal Quality.

The Town and Caſtle of *Lochmabon* was a Royal Burgh as well as *Annan*, but the Caſtle is ſince demoliſhed; three Parts of it is ſurrounded by Lakes which afford excellent Fiſh.

There being nothing particular to mention about *Wachopdale*, more than that it lies between *Annandale* and *Eſkdale*, we paſs to *Nidiſdale*; which Diviſion is encompaſſed on all Sides with Rocks and Hills that produce Paſture, and the Vallies Plenty of good Corn.

A Compoſition in Imitation of AMBER.

TAKE the Yolks of ſixteen Eggs, beat them well together in an earthen Pan well glazed, then take two Ounces of Gum Arabick, and one Ounce of the Gum of Cherry-trees, reduce them into Powder, and mix them with the Yolks, that ſo they may diſſolve, and be incorporated by ſtirring them frequently about; this done, ſet them for ſix or eight Days in the Sun, and they will by Degrees grow harder and harder. You may, before they are thorough dry, form or impreſs what you will in ſome Mould, and lay them again in the Sun, or ſome warm Place, to dry, and whatſoever you have made, will look clear of the Colour of Amber, and have its natural Qualities to draw up a Straw or Paper.

MATHE-

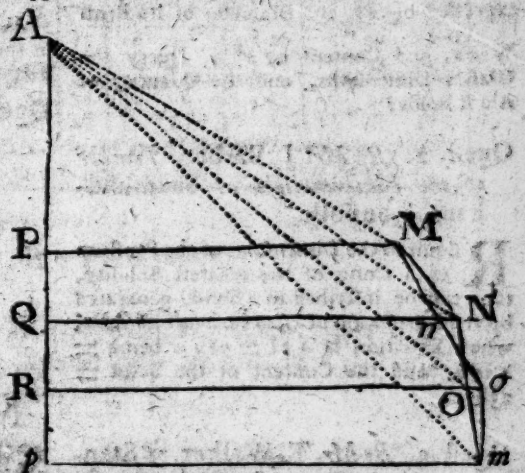
MATHEMATICAL CORRESPONDENCE.

A Physico-Mathematical PROBLEM, *with its* SOLUTION.

PROBLEM. *Supposing the Law of Attraction to be in the inverse Ratio of the Square of the Distance, to find the Nature of the Solid of the greatest Attraction.*

SOLUTION, *by Mr.* ST. JAMES.

IT is plain in the first Place, that the Solid which attracts the given Point A with the greatest possible Force, of all Solids under the same Quantity of Matter, must be a Solid of Rotation, since there can be no Reason, why the Matter should be distributed more on one Side than on others.



To find the Nature of the Curve which forms this Solid by a Rotation about its Axis, let there be taken four equidistant and infinitely near Ordinates, and let the Lines M N, N O, O *m* be three infinitely small Sides of the Curve, whose Points *M* and *m* are supposed to be fixed, and the Points N and O variable. Call the Lines A P, A Q; A R, A *p*; x, x'; x'', x'''; the Lines M P, N Q, &c. y, y', &c. the Lines A M, A N, &c. z, z', &c.

First, by the Nature of the Problem, we have, $y\dot{y}\dot{x} + y'\dot{y}'\dot{x} + y''\dot{y}''\dot{x} =$ a constant Magnitude; whence, after having taken the Differences, and observing that only y' and y'' are variable, we get $\dot{y}'\dot{y}' = \dot{y}''\dot{y}''$.

Now we shall find, by well know Methods, that the Attraction of the Solid formed by the Rotation of M N *n p* P about P *p* is $1 - \frac{x}{z} \times \dot{x} + 1 - \frac{x'}{z'} \times \dot{x} + 1 - \frac{\dot{x}''}{z''} \times \dot{x}$, which should be a *Maximum*: Therefore, taking the Difference, and observing that only x' and x'' are variable, and making it $= 0$, we get $\frac{x'\dot{x}'}{x' \times x' - \dot{x}'} = \frac{x''\dot{x}''}{x'' \times x'' + \dot{x}''}$; but the right angled Triangles A N Q, A O R, as the Points Q and R are fixed, give $y'\dot{y}' = x'\dot{x}'$ and $y''\dot{y}'' = x''\dot{x}''$: Therefore $\frac{x'y'\dot{y}'}{x'x' \times x' - \dot{x}'} = \frac{x''y''\dot{y}''}{x''x'' \times x'' + \dot{x}''}$. And since $y'\dot{y}' = y''\dot{y}''$, we shall have $\frac{x'}{x'x' \times x' - \dot{x}'} = \frac{x''}{x''x'' \times x'' + \dot{x}''} \Rightarrow$ a constant Magnitude $\frac{1}{gg}$; therefore we shall have $z^3 = gg\,x$ for the Equation of the Curve required.

The Problem might be solved another far more simple Way, by taking the Attraction of any one Point of the Surface of the Solid; which Attraction is $\frac{x}{z^3}$, and making it equal to a constant Magnitude $\frac{1}{gg}$, we shall have $z^3 = gg\,x$, for the Equation of the required Curve, as before: For 'tis manifest, that if the Attraction were less on any Place of the Surface than another, that Point might be placed out of the Solid, so as that it would attract more, and the Solid would be no longer that of the greatest Attraction, contrary to the Hypothesis.

New QUESTIONS *to be anſwered.*

Queſtion 1. *By Mr.* T. Barker, *of* Wiſſett *in* Suffolk.

BEING lately at a Gentleman's on his Birth-day, the Company, after Dinner, drank his Health in a Bumper of Ale; the Glaſs was conical, whoſe Depth was expreſſed by $x^{\frac{1}{4}}$, the Diameter of its Brim by $x^{\frac{3}{5}}$, and Content by $x^{\frac{3}{7}}$. Query the Glaſs's Dimenſions, and the Quantity of Ale it holds?

Queſt. 2. *By Mr.* J. Barber, *Teacher of the Mathematicks at* Saxmundham *in* Suffolk.

REquired the Dimenſions of the Fruſtum of a Cone of the greateſt Solidity, that can be inſcribed in a Solid, generated by the Revolution of a Curve about its Axis, whoſe Equation is $a x^5 = y^7$; a being $=$ 4.096, and the Content of the Solid $=$ 25872.

Queſt. 3. *By Mr.* T. Walker, *of* Stanton-Bury, Bucks.

A Gentleman has a conical Sugar Loaf whoſe Height is 20 Inches, and Baſe Diameter 16 Inches, which is to be cut by a Plane parallel to its Baſe, ſo that the Weight of the leſſer Part, ſhall be equal to one half of the Weight of the greater Part. Query the Dimenſions of each Part after it is cut in this Manner?

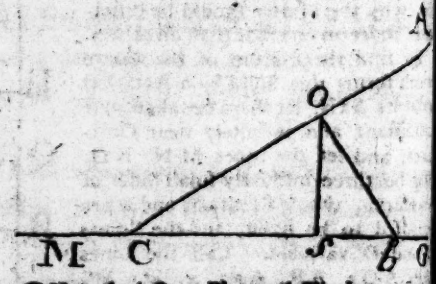
Queſt. 4. *By Mr.* T. Sadler, *of* Newhall *in* Cheſhire.

YE Analyſts, who can with Eaſe,
Solve deep Equations, when you pleaſe.
From what you ſee appear below,
A witty Poet's Name, you'll know,
Who, in Fame's Temple, mounted high
His Genius with Simplicity.

$$\text{Given} \begin{cases} \sqrt{\frac{x+y+z}{4y^2}} = 1.3919 \\ x^2 - y - z = 25, \\ \frac{xyz}{x^2} = 3.2857. \end{cases}$$

Note, x, y, z repreſent the three Letters in the Alphabet that expreſs this ingenious Perſon's Name.

Queſt. 5. *By Mr.* T. Todd, *of* Weſt-Smithfield.



SUppoſe A C, a Piece of Timber moveable upon a fixed point C, to be ſupported by two given Props, *viz.* bo, perpendicular to A C, and ov, perpendicular to the horizontal Plane M G, and the whole Weight or Preſſure ſupported in the Point a, $= w$; to find the preciſe Weight upon each Prop.

Queſt. 6. *By* Mr. G. Witchell, *Teacher of the Mathematics.*

SUppoſing a Circle to be deſcribed upon the tranſverſe Axis of a given Ellipſis (as a Diameter) and that a right Line is drawn, through two given Points in the Circumference of the Circle, to cut the Ellipſis; it is required to determine the Length of thoſe two Segments of the right Line which are intercepted between the Peripheries of the Circle and Ellipſis.

*** *We are very much obliged to our ingenious Correſpondent,* Mr. Walker, *for his kind Hints, and take this Opportunity to inform him, and the reſt of our Contributors, that though we ſhall never refuſe to inſert a good Queſtion becauſe the Solution was not ſent along with it, yet it will be always more acceptable to us, to receive the Solutions and Queſtions together. But with Reſpect to the Ænigmas, Paradoxes, &c. it will be abſolutely requiſite to ſend the Anſwers with them, as it will, otherwiſe, be impoſſible for us to judge of their Propriety. We muſt alſo requeſt the Favour of our Correſpondents to ſend their Letters by the 16th Day of the Month, otherwiſe they muſt be poſtponed for a Month, which is the Caſe of ſeveral this Month.*

Appen-

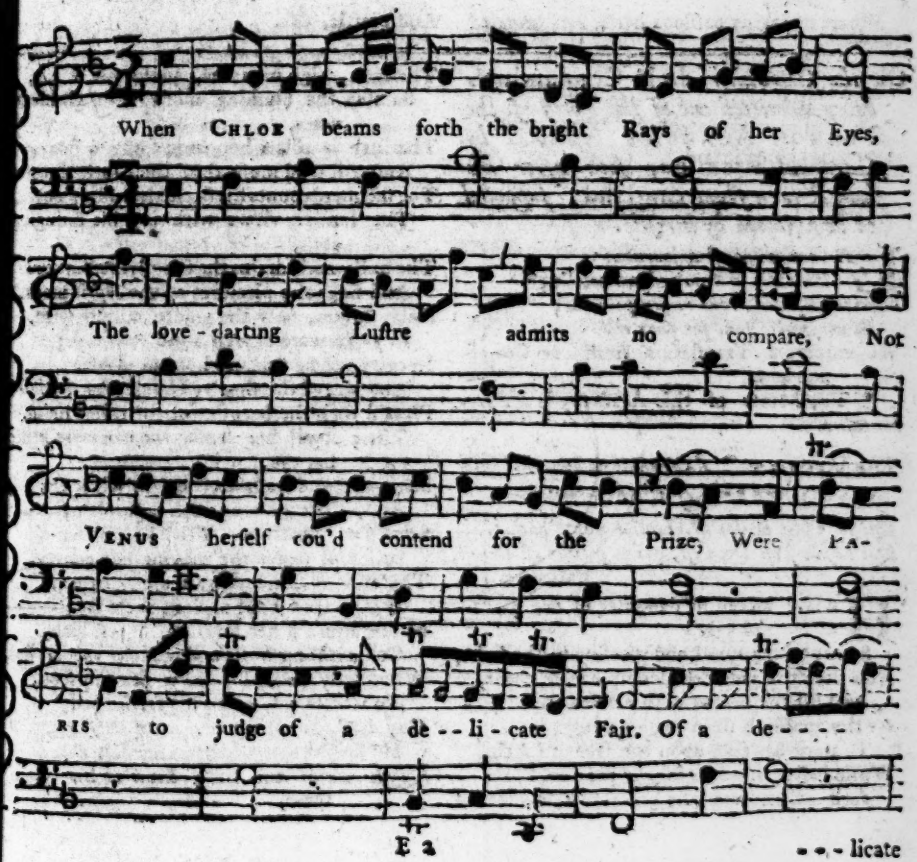
Apparent Times of the Eclipſes of the Satellites of Jupiter *which will happen in* February, 1764, *computed, from New Tables, to the Meridian of the* Royal Observatory *at* Greenwich.

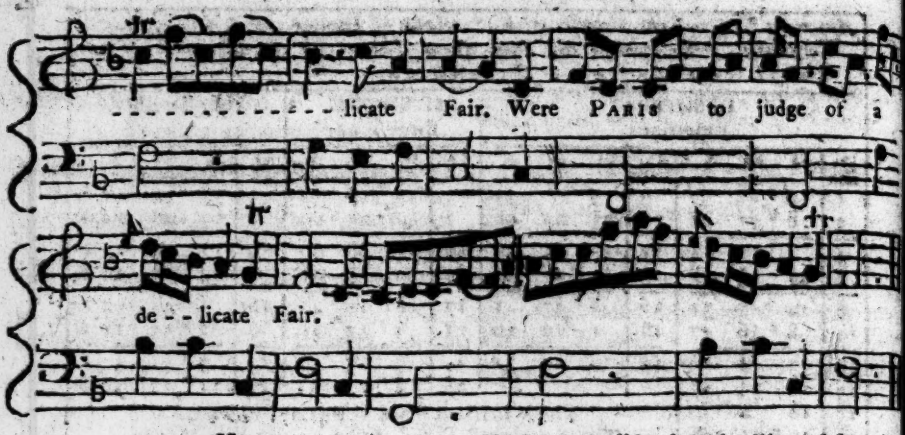
I. Satellite. Emerſions.								II. Satellite. Emerſions.								III. Satellite.			
D	H.	M.	S.	D	H.	M.	S.	D	H.	M.	S.	D	H.	M.	S.				
1	12 *	12	57	19	5	0	45	3	11 *	8	24	4	21	49	8	I			
3	6 *	41	31	20	23	29	46	7	0	27	14	1	23	52	21	E			
4	1	10	8	23	17	18	59	10	13 *	46	15	9	1	49	23	I			
6	19	38	48	24	12 *	27	54	24	3	5	26	9	3	52	24	E			
8	14	7	31	26	6 *	57	1	17	16	24	47	16	5 *	40	22	I			
10	8 *	36	17	28	1	26	20	21	5 *	43	16	16	7 *	55	11	E			
12	3	5	6	29	20	23	31	24	19	3	51	23	9 *	51	57	I			
13	21	33	57					28	8 *	23	31	23	11 *	57	36	E			
15	16	2	50																
17	10 *	31	46																

Thoſe marked * are viſible at *Greenwich*.
There are no Eclipſes of the Fourth this Month.

POETRY.

The Delicate Fair, *compoſed by Mr.* Michael Arne, *and ſung by Miſs* Wright *at* Ranelagh; *being different from the* pirated *Copies of the ſame Song under the Title of* The Delicate Air.





II.

As jewels, by ſparkling, will dazzle the ſight,
Her eyes to be di'monds a poet might ſwear;
But where is the meaning, the mental delight,
That flows from each look of my delicate fair.
Of my delicate fair.
That flows, *&c.*

III.

Oh, how my fond heart is alarm'd at each look,
Where no raging paſſions her beauty impair!
Her temper glides ſmooth, like a ſoft purling brook,
Unruffl'd by ſtorms is my delicate fair.
is my delicate fair.
Unruffl'd by, *&c.*

IV.

Dear *Venus* the ſuit of thy vot'ry approve,
Let this gentle beauty but fall to my ſhare
The buſ'neſs of life ſhall be only to love,
And prattle all day of my delicate fair.
of my delicate fair.
And prattle, *&c.*

On the Chevalier de la Condamine's *being admitted one of the Forty of the* FRENCH ACADEMY *inſtituted by Cardinal* Richlieu, *ſoon after his late Return from* England; *ſuppoſed to be written by himſelf.*

LA *Condamine eſt aujourdhui*
Admis a la troupe Immortelle;*
Mais il eſt ſourd, tant mieux pour lui;
Et non muët, tant pis pour elle.

We entreat a Tranſlation from our Correſpondents.

* The Motto of this Academy is *à l'Immortalité.*

The VIOLET. *Addreſſed to Miſs* M*** T****** *of* Cheſhunt.

Qui te videt beatos eſt, beatior qui te audiet,
Qui baſiat ſemi Deus eſt, qui te potitur eſt Deus!
BUCHANAN.

HAIL! blooming daughter of the youthful year!
Sweet to the ſmell and pleaſing to the ſight,
How does thy preſence gloomy nature chear,
And fill the boſom with a ſoft delight!
At thy approach ſtern rugged winter flies,
To pour his rage upon the frozen north,
While balmy *Zephyrs* fill our peaceful ſkies,
And call the buds and genial bloſſoms forth!
The lark, high mounted, at the riſe of day,
Salutes the bluſhing morn with gladſome notes,
The little warblers hop from ſpray to ſpray,
And trill wild muſic thro' their little throats.
The ſhepherd counts his flock, the ruſtic plough,
The farmer views with joy his ſpringing corn,
The milk-maid drains the ſweetly-ſmelling cow,
And ſings the pleaſures of the *April* morn.
Now, lovers, now the golden minute ſeize,
In ev'ry word expreſs a gen'rous care;
In ev'ry act be ſtudious how to pleaſe,
And weave the flow'ry chaplet for the fair.
Pleas'd with the beauties of the riffled mead,
Their ſmell her ſenſe, their colours ſtrike her eye,
Snow-drops, like innocence, in white array'd,
And vi'lets glowing with a purple dye.
Shou'd ye, ambitious, ſtrive to gain her ear,
In ſofteſt words the moving tale convey,
The moving tale ſhall gain a pitying tear,
If it be true what ancient poets ſay. ——
Nature aſſum'd her loveliеſt, faireſt look,
Cold chilling froſts and noxious vapours fled,
When jolly ſpring his native ſkies forſook,
To woo fair *Flora* to his fertile bed.
Gay dreſt, in all the colours of the bow,
He ſought the goddeſs in her fair abode:
Quick winds and haſty ſhow'rs his coming ſhew,

But his bright beams proclaim the preſent god.
The fanning gales convey a grateful ſmell,
From where the hyacinth and crocus blow;
With ſudden life the buds around him ſwell,
And while he treads all flow'rs promiſcuous grow.
The feather'd ſongſters full of mirth appear,
And chant his nuptial bliſs thro' ev'ry grove;
Spring, the gay God, that leads the ſmiling year,
And *Flora*, queen of beauty and of love!
From this unbalm'd, this chaſte delight aroſe,
An offspring worthy of their mutual flame;
Invok'd *Lucina* eas'd the mother's throes,
And *Violetta* was the daughter's name.
Whate'er enraptur'd poets have deſign'd,
Of wit, youth, beauty, or excelling grace,
The nymph enjoy'd in perſon and in mind,
So bright her wit, ſo beauteous was her face.
Alas! What ills muſt careleſs nymphs betide,
Since prudence nought avails to guard the dame?
Laſcivious *Pan* the blooming virgin ey'd,
And vow'd by force to gratify his flame.
The virtuous fair his loath'd embraces flies,
The am'rous god purſues with equal ſpeed,
The plains around re-eccho to her cries,
While ev'ry pow'r is abſent from her aid.
Fatigu'd, her panting boſom heaves for breath,
Her trembling legs refuſe the tedious race;
She faints, ſhe ſinks into the arms of death,
And a cold paleneſs overſpreads her face.
Her melancholy fate the mother mourns,
With tears faſt flowing in a gentle ſhow'r:
The much-lamented child to life returns;
No more a virgin, but a purple flow'r!
As long as grief for innocence diſtreſt,
As long as tears from gentle hearts ſhall flow,
So long her fate ſhall melt the feeling breaſt,
With gen'rous pity, and with virtuous woe.
The gentle nymph the mournful ſtory hears,
Within her boſom various paſſions move;
Soft pity melts her tender ſoul to tears,
And virtuous pity is a friend to love!

Jan. 10, 1764. G. HAYDEN.

The reviv'd Pantomime Entertainment of PERSEUS *and* ANDROMEDA, *concludes with a New Maſque of Singing and Dancing, call'd the* ARCADIAN NUPTIALS, *in which is the following Paſtoral Dialogue, ſung by Mr.* Beard *and Miſs* Hallam, *and performed before their Majeſties and their Serene and Royal Highneſſes the Prince and Princeſs of* Brunſwick.

COLIN and PHILLIS.

COLIN.

HARK! Hark! o'er the plains what glad tumults we hear!
How gay all the nymphs and the ſhepherds appear!
With myrtles and roſes new-deck'd are the bowers,
And every buſh bears a garland of flowers.
I can't, for my life, what it means, underſtand;
There's ſome rural feſtival ſurely at hand.
Ner harveſt nor ſheep-ſhearing, now can take place—
But *Phillis* will tell me the truth of the Caſe.

PHILLIS.

The truth, honeſt lad! — Why you ſurely ſhould know,
What rites are prepar'd in the village below;
Where gallant young *Thirſis*, ſo fam'd and ador'd,
Weds *Daphne*, the ſiſter of CORIN, our Lord.
That *Daphne*, whoſe beauty, good-nature and eaſe,
All fancies can ſtrike, and all judgments can pleaſe.
That CORIN — but praiſe muſt the matter give o'er,
You know what HE is, and I need ſay no more.

COLIN.

Young *Thyrſis* too claims, all that honour can lend;
His countrymen's glory, their champion and friend;
Tho' ſuch ſlight memorials ſcarce ſpeak his deſerts;
And, truſt me, his name is engrav'd on their hearts.

PHILLIS.

But hence to the bridal, behold how they throng;
Each ſhepherd conducting his ſweetheart along:
The joyous occaſion, all nature inſpires,
With tender Affections, and chearful deſires.

DUETTO.

Ye pow'rs, that o'er conjugal union preſide,
All-gracious look down on the bridegroom and bride:
That beauty, and virtue, and valour may ſhine,
In a race, like themſelves, with no end to the line:
Let honour, and glory, and riches, and praiſe,
Unceaſing attend them thro' numerous days:
And while in a palace fate fixes their lot,
Oh! may they live eaſy as thoſe in a cot.

SEMI-CHORUS of NYMPHS,

While the dancers are winding the wreaths of flowers about the bridegroom and bride.

Faſt the blooming virgin tye,
No thorns beneath the roſes lie.

SEMI-CHORUS of SWAINS.

Round the hero ſwiftly move!
Glory bind to ſacred love.

GRAND CHORUS as the dance concludes.

Bleſs'd for ever may they be!
Ever bound, yet ever free.

The

The following muſical Piece was performed at Drury-Lane *Theatre, on Occaſion of the Nuptials of their Serene and Royal Highneſſes the Prince and Princeſs of* Brunſwick.

H Y M E N,

The Overture compoſed by Mr. POTTER.

[After the Overture, the Curtain riſes to ſoft muſick, and diſcovers a rural Scene, a Temple in view, Hymen a-ſleep in a Bower, an Altar, and a Torch not lighted.]

The muſic by Mr. ARNE, jun.

Enter CUPID.

AIR.

HOW pleaſing, dear wedlock, appear thy domains!
How ſoft are thy fetters, how eaſy thy chains!
No Pleaſure on earth is ſo perfect as thine,
Thy joys with the virtuous are almoſt divine;
For friendſhip and love here together unite
The raptures of ſenſe with ſupernal delight.

RECIT.

Hymen, awake!—The God of love attend!

HYMEN, riſing.

What cauſe propitious brings my deareſt friend?

AIR.

Joy and pleaſure great and free
Fill my breaſt at ſight of thee!
Tell me, gentle God of love,
Why you viſit *Hymen*'s grove?

CUPID.

RECIT.

Dreadful war, the human foe,
Leaves to peace the world below;
Diſcord quits the frighted land,
Baniſh'd by the victor's hand.

AIR.

See around, in ev'ry grove
Mirth, tranquility, and love;
Take thy torch and golden carriage,
Now's the reign of love and marriage.

DUET.

HYM. Love rewards the ſoldier beſt,
CUP. *Hymen* makes the virgin bleſt;
Together { Then, O *Venus*, haſte away,
For 'tis *Hymen*'s holiday.

Enter VENUS.

RECIT.

Hymen, the ſacred rites of love prepare!

HYMEN.

I will,—But firſt, O queen, for whom declare!

VENUS.

RECIT.

For one divinely ſent mankind to pleaſe,
Form'd to command with dignity and eaſe;
Of manners pleaſing, God like where he can,
A prince! a hero, and a worthy Man.

DUET. VENUS and CUPID.

What but lovely blooming youth,
Grac'd with all the charms of truth,
Fair with matchleſs elegance,
Can the hero recompenſe?
Who around the ſpacious earth,
Bright with beauty, great by birth,
Should, but ſhe, ſuch merit ſhare,
Who's as virtuous as ſhe's fair?

The Muſic by Mr. POTTER.

VENUS.

RECIT. *Accompanied.*

Jove ſmiles approval from above,
And gratulates connubial love;
Auſpicious fate the union wills,
And in the pair ſweet hope inſtills.

CUPID *lights the Altar.*

RECIT.

The fire I've kindled! light thy torch again.

HYMEN.

'Tis done; and now we'll form the marriage chain.

VENUS.

AIR.

Bleſs, O *Jove*, the pair we join,
And with friendſhip love entwine;
Realize their fancy'd hope,
And to rapture give full ſcope;
That they ſoon may feel with pleaſure,
Joys parental without meaſure.

RECIT. *Accompanied.*

Nymphs and ſhepherds, quick advance!
Join the feſtive ſong and dance!
He the kind, and ſhe the fair,
Bleſſing thus the happy pair.

Enter Nymphs and Shepherds.

FULL CHORUS.

We conſign the bright pair,
O Great *Jove!* to thy care:
Deck them with honour's glorious crown,
And make immortal joys their own.

A DANCE.

A CHARACTER.

AN ancient ſage in Wiſdom's rules well verſ'd,
Juſtly preſcribes *ſelf-knowledge* as the firſt;
But conſcious thou, what penance it muſt coſt,
To make acquaintance with a ſoul ſo loſt,
Do'ſt ſtill the ſalutary Science ſhun;
Which my officious zeal at length makes known.
"Scorn'd by the wiſe, deteſted by the good,
Nor underſtanding aught, nor underſtood;
Profane, obſcene, loud, frivolous and pert:
Proud without ſpirit, vain without deſert;
Affecting paſſions, vice has long ſubdued;
Deſperately gay, and impotently lewd:
And when thy weak companions round thee ſit,
By eminence of folly, deem'd a wit."

A

A CANDID REVIEW *of* Intereſting BOOKS.

ARTICLE I. THE *Roman Hiſtory, from the Building of Rome to the Ruin of the Commonwealth. Illuſtrated with Maps and other Plates.* Vol. III. *By* N. Hooke, *Eſq*; Printed for Meſſ. *Tonſon, Hawkins,* and *Longman.* 4to. 694 Pages. Price 1*l.* 1*s.* 0*d.* bound.

The Publiſhers beſpeak the Attention of the Public to this third Vol. by the following Advertiſement. "This Volume, which continues Mr. *Hooke's Roman Hiſtory* to the End of the *Gallic* War, was printed under his Inſpection before his laſt Illneſs. As the former Volumes have been received in a Manner the moſt honourable to that accurate and able Hiſtorian, we cannot but indulge the Hopes, that this will meet with an equally favourable Reception."

To this Vol. is prefixed a Table of the Contents to the three Volumes, which conſiſt of nine Books, ſubdivided into Chapters, too numerous and particular for us to inſert.———This Vol. begins with the ſeventh Book, and gives a Hiſtory of the Interval between the Death of the younger *Gracchus*, in the Year of *Rome* 632, when, real Liberty expiring, the Form only of the old Conſtitution remained, to the Dictatorſhip of *Sylla*, in 671, who changed the very Form of that Conſtitution.

Book VIII. treats of the Period, from 671, when *Sylla* was created perpetual Dictator, to the Commencement of the firſt Triumvirate, formed in the Year 693.

Book IX. continues the Hiſtory from thence, when the tripple League between *Craſſus*, *Pompey*, and *Cæſar*, which is called the firſt Triumvirate, was formed, to the Beginning of the Civil War, in the Year 704.

Some Account of the Laws and Regulations of *Sylla* for reſtoring the Dignity and Tranquility of the State, we ſhall give as a Specimen of this Work, though the Merit of this Author is well known to the Learned.

Book VIII. Chap. 1. p. 166. He reſtored to the Senate a Privilege which they had many Years loſt [and by their Miſbehaviour had very juſtly forfeited] ordaining, that none but Senators ſhould for the future be appointed to the office of Judges.

And that the auguſt Aſſembly, thus augmented and *thus honoured with the* Judicature, might thereafter have the contingent vacancies in their Houſe regularly filled up with properly-qualified Perſons, he ordained, that inſtead of only *eight* Quæſtors, as before, *twenty* ſhould be annually created.

But in order to raiſe and eſtabliſh more effectually the Authority of the Senate, the Dictator almoſt totally annihilated that of the Tribunes, by depriving them of the Power of Legiſlation; and by decreeing, that no Citizen, who had ſerved in the Office of Tribune, ſhould ever be capable of holding any ſuperior Dignity: A Decree which would naturally hinder all Perſons, whoſe high Birth, or extraordinary Talents might render them formidable to the Ariſtocratic Faction, from ſeeking, or even coveting the *Tribuneſhip*.

Not content with humbling the People, by this Diminution of the Power of their Tribunes, the Dictator took from the *Tribes* the Privilege, they had obtained by the *Domitian* Law, of filling up, by their Elections, the Vacancies which happened in the ſeveral Colleges of the Pontifs, Au-

the

gurs, and Guardians of the *Sibylline* Books; and reſtored to theſe Colleges the Power of ſupplying their Vacancies by *Co-optation*: Increaſing, at the ſame Time, the Number of Members in each College from *Ten* to *Fifteen*.

With Regard to the *Civil Magiſtracy*, the Dictator enacted, that, whereas certain Intervals had been required by Law between the Offices of *Ædile* and *Prætor*, and of *Prætor* and *Conſul*, it ſhould be permitted, for the future, to ſue for the higher Office immediately after having held the lower. No Man, however, was to ſtand for the Prætorſhip, who had not been Quæſtor; nor for the Conſulſhip, who had not been Prætor: And he revived the Law, which forbad the conferring on any Citizen a ſecond Conſulſhip, before ten Years were elapſed from his holding that Dignity.

And, having firſt augmented the Number of the Prætors from *ſix* to *eight*, he decreed, that, of theſe eight, ſix, at leaſt, ſhould continue at *Rome* a whole Year to preſide in the ſeveral Courts of Juſtice, and ſhould afterwards have their Provinces aſſigned them by Lot.

And whereas it was the Cuſtom for the Prætors, when they entered on their Office, to fix up an Edict, declaring the Method in which they would proceed in trying Cauſes during their Year; which Method their Succeſſors (being under no Obligation to obſerve it) did not obſerve, ſo that the Forms of Proceſs were continually changing; *Sylla*, to remedy this Inconvenience, ordained, that the Prætors ſhould always uſe one and the ſame Method in their judicial Proceedings.

And he farther decreed, that it ſhould no longer be permitted to reject above three of the Judges appointed to ſit upon a Cauſe: And that in criminal Cauſes the Votes might be taken, either publickly, or privately, at the Option of the Perſon accuſed.

The ancient Penalties for Bribery and Corruption in Trials were revived, and ſuch Precautions taken, as would be moſt likely to recover the Honour of the Senatorian Judges, who, formerly, when in Poſſeſſion of the Judicature, had not behaved themſelves in a Manner that did them much Credit.

To theſe Regulations concerning the Senate, the Prieſts, and the Magiſtrates of the City, the Dictator added others relating to the Governors of the Provinces. He decreed, that no Governor ſhould lead his Army out of his Province, or himſelf leave the Province, without an Order from the *Roman* People, or Senate.

That whoever was ſent with any Command into a Province, ſhould hold that Command 'till he was expreſly recalled; whereas, before, the Office of a Commander continued no longer than a ſet Time, upon the Expiration of which, if no Succeſſor came, he was put to the Trouble and Inconvenience of getting a new Commiſſion from the Senate.

Nor was any Commander to remain, after the Arrival of his Succeſſor, more than thirty Days in his Province.

Nor, at his Departure from it, to exact from the Inhabitants a greater Sum than was allowed by the Laws.

ART. 2. *The Hiſtory of the Diſcovery and Conqueſt of the* Canary Iſlands: *Tranſlated from a* Spaniſh *Manuſcript, lately found in the Iſland of* Palma. *With an Enquiry into the Origin of the ancient Inhabitants. To which is added, a Deſcription of the* Canary Iſlands, *including the Modern Hiſtory of the Inhabitants, and an Account of their Manners, Cuſtoms, Trade,* &c. *By* George Glas. *Printed*

Printed for R. *and* J. Dodſley, *and* T. Durham, 4*to*, 368 *Pages*, *Price* 15*s*. *in Boards*, *Illuſtrated by Charts*.

To this Work is prefixed an Introduction and Table of Contents. It is divided into four Books.

Book I ſubdivided into XVII Chapters, treats of the various Diſcoveries of theſe Iſlands.

Book II divided into XXIII Chapters, treats of the Manners and Cuſtoms, and of many remarkable Circumſtances and Events.

Book III, conſiſting of VII Chapters, gives us a Hiſtory of ſome of the moſt remarkable Iſlands, *Palma*, *Tenerife*, *&c*. the natural Hiſtory, the Inhabitants, Government, Manufactures, *&c*

Book IV, containing XX Chapters, includes the Hiſtory of other Iſlands in the ſame Manner.

As a Specimen of this Work we ſhall give ſome Extracts of the Manners, and Cuſtoms, of the Natives of *Canaria*, *Tenerife*, *Palma*, *Gomera*, and *Hierro*.

The Deſcendants of this mingled Nation are now denominated *Spaniards*, and uſe no other Language than the *Caſtillian*: The Gentry ſpeak it in Perfection, but the Peaſants, who inhabit the remote Parts of the Iſlands, in a Manner almoſt unintelligible to Strangers; their Pronunciation being ſuch as not unaptly to be compared to a Man talking with ſomething in his Mouth.

People of all Ranks in theſe Iſlands are of an amorous Diſpoſition: their Notions of Love are ſomewhat romantic, which may be owing to the want of innocent Freedom between the Sexes; yet I never could obſerve that the Natives here are more Jealous than the *Engliſh* or *French*, altho' they have been ſo repreſented by thoſe Nations. The Truth of the Matter is, that in every Country Cuſtom has eſtabliſhed between the Sexes certain Bounds of Decency and Decorum, beyond which no Perſon will go, without a bad Intention: For Inſtance, Freedoms are taken with Women in *France*, which are there reckoned innocent; but would not be ſuffered by Ladies in *England*, who have any Regard for their Virtue or Reputation: Again, in *England* virtuous Women allow Men to uſe ſuch Freedoms with them, as no virtuous Women in theſe Iſlands could bear with: yet in *France* there are no more looſe Women, in Proportion to the Number of Inhabitants, than in the *Canary Iſlands*.

I am informed that it is not uncommon for a Lady here to ſend to a Man, and make him an Offer of her Perſon in an honourable Way; if he does not think proper to accept of her Offer, he keeps it ſecret till Death; if he ſhould do otherwiſe, he would be looked upon by all People in the moſt deteſtable and deſpicable Light. Young Men are not permitted to court young Girls when they have no Intention to marry them; for if a Woman can prove that a Man has, in the leaſt Inſtance, endeavoured to win her Affections, ſhe can oblige him to marry her.

A young Lady in one of theſe Iſlands fell deeply in love with a Gentleman, and uſed every Art ſhe was Miſtreſs of, to captivate his Heart, but in vain; at laſt, being hurried on by the Violence of her Paſſion, which rendered her quite deſperate, ſhe made uſe of the following Stratagem to oblige him to marry her. She proſecuted him upon a Promiſe of Marriage, which ſhe pretended he had made to her, and ſuborned Witneſſes

who ſwore they had ſeen him in Bed with her. The Evidence appeared ſo clear to the Court, that, without the leaſt Heſitation, it gave a Sentence for the Plaintiff, compelling the Defendant to marry her. With this unjuſt Sentence he was obliged to comply, though with the utmoſt Regret; for as the Lady had ſhewn ſo little Regard for her Reputation as to ſwear falſly to her own Shame, he could look upon her in no other Light than that of a looſe abandoned Woman: However he was agreeably diſappointed, and had all poſſible Reaſon to believe ſhe was a Virgin. Being amazed at her ſtrange Conduct, he entreated her to unravel the Myſtery of her unaccountable Behaviour; "for (ſaid he) you muſt be ſenſible that I am innocent of what you have ſworn againſt me." She frankly owned the whole Affair, and added for an Excuſe, that ſhe would rather have lived in Hell, than not to have obtained the Object of her Love. Upon this Declaration he generouſly forgave her, and they afterwards lived happily together.

Generally ſpeaking, there are more unhappy Marriages here, than in thoſe Countries where young People have more Acceſs to be acquainted with one another's Diſpoſitions before they agree to live together for Life. In Countries where innocent Freedoms ſubſiſt between the Sexes, Lovers are generally not ſo blinded with Paſſion, that they cannot perceive their Miſtreſſes are mortal, and partake of human Frailty, conſequently reſolve to put up with ſome Failings: But this Thought never enters into the Imagination of a romantic Lover.

ART. 3. *Dialogues on the Uſes of Foreign Travels; conſidered as a Part of an* Engliſh *Gentleman's Education: Between Lord* Shafteſbury *and Mr.* Locke. *By the Editor of Moral and Political Dialogues. Printed for* A. Millar, *and* W. Thurlbourn, *and* J. Woodyer. *Small Octavo. Pages* 201. *Price* 2s. 6d. *ſewed.*

As a Specimen of this Work, Page 51, Lord *Shafteſbury* is introduced aſking, "what ſay you to that ſupreme Accompliſhment, *the Knowledge of the World?* A Science ſo uſeful, as to ſuperſede or *Diſgrace* all the reſt; and ſo profound, as to merit all the Honours, and to fill up all the Meaſures of the beſt Philoſophy? For, *by a Knowledge of the World*, I mean that which reſults from the Obſervation of Men and Things; from an Aquaintance with the Cuſtoms, and Uſages of other Nations; from ſome Inſight into their Policies, Government, Religion; in a Word, from the Study and Contemplation of Men, as they preſent themſelves on the great Stage of the World, in various Forms, and under different Appearances. This is that Maſter-ſcience, which a Gentleman ſhould comprehend, and which our Schools and Colleges never hear'd of.

Above all, let him be taught to give an early Attention to the Manners of Men, to obſerve their Diſpoſitions, to inſpect and analyze their Characters. What a Field is here for an intelligent young Man, aſſiſted by the ſuperior Lights and Experience of an able Governor! And what a Harveſt of true Knowledge and Learning muſt he gather and bring home with him, from the numberleſs varied Scenes he has paſſed through in his Voyages! With what Luſtre muſt ſuch a Perſon appear in the Court or Senate of his own Country! How ſecure againſt the Attempts of Artifice and Deſign! the Plots of inſidious Enemies, or the Pretences of falſe Friends!

riends! how apt for the Buſineſs of Life, and for bearing his Part in ublic Debates and Conſultations.

Page 12, Mr. Locke is repreſented as anſwering,

The utmoſt I can allow to this Diſcipline of forein Travel, under the dea of its furniſhing *a Knowledge of the World*, is, that it may poſſibly wear young Man into ſome ſtudied and apiſh Reſemblance of the Models he opies from, in his Deportment and Manners; or that the various Scenes, e has paſſed through, may furniſh Matter, at his Return, for much unrofitable Babble in Converſation: But, that he ſhould come back fraught ith any ſolid Information concerning Men and Things, ſuch, as in our Lordſhip's ſublime Phraſe, may fit him *to appear with Luſtre in he Court or Senate of his own Country*, is what I can never promiſe myſelf rom this faſhionable Mode of Education.

Seriouſly, my Lord, the World is a ſolemn Word, and the Study of it as an Air of ſomething plauſible and impoſing. But thoſe, who know hat the World is, will think it beſt that a young Man begin with what s the firſt and laſt Concern of every Man, the Study of himſelf; and, if, n due Time, he come to underſtand, and ſtill more to value, as they deerve, the Characters of the great and good Men of his own Country, the pprobrious Name of *home-bred* will not hinder him from acquiring he beſt Fruit, with which a Knowledge of the World, rightly underood, can furniſh him

For, my Lord, I muſt not on ſo inviting an Occaſion, as this, conceal n odd Fancy of mine from your Lordſhip.

The Affair of *knowing the World*, about which weak and fantaſtic Peole make ſo much Noiſe, and which, with ſo much Sufficiency, one hears hem perpetually inſiſting upon, in all Companies, is of all others the iceſt and moſt momentous Step that is made in Education. And, tho' olumes have been written to teach us how we may beſt become Scholars, Orators, Courtiers, what not; yet not one Leaf do I ever remember to ave ſeen, compoſed by any capable Man, that inſtructs us in the proper Way of getting into this great Secret.

It is not a Matter to be entered upon, if I were vain enough to think myſelf capable of it, in this caſual Converſation, but thus much I may reſume to ſay, that whoever deſigns to let a young Man into a ſafe and ſeful Knowledge of the World, muſt do it in a Way very remote from hat which has hitherto been taken.

A young Man, they tell us, muſt know the World; therefore, ſay they, uſh him into it at once, that he may acquire that Knowledge, which his wn Experience, and not another's, muſt teach him.

I, on the other Hand, take upon me to ſay, therefore keep him out of hat World, as long as you can; and when you commit him to it, let the bleſt Friend or Tutor lend him his beſt Experience to conduct him grally, cautiouſly, imperceptibly into an Acquaintace with it.

You aſk the Reaſon of this myſterious Procedure, yet methinks it ſhould e obvious enough. From *ſixteen to one and twenty*, (a Period, in which he Cares of an ordinary Education ceaſe, or are much relaxed) is that reciſe Seaſon of Life which requires all the Attention of the moſt vigiant, and all the Addreſs of the wiſeſt Governor. The Paſſions are then

opening; Curioſity awake; and the young Mind ready to take its Ply from the Seducements of Faſhion, and creditable Example.

Nor is this the worſt An Education, that deſerves the Name, has inculcated Maxims of Honour and Probity; has inſpired the nobleſt Sentiments of moral Duty; has impreſſed a Veneration for all the Virtues, and an equal Horror for all the Vices of Humanity.

Full of theſe ſublime Ideas, which his Parents, his Tutors, his Books, and even his own ingenuous Heart has rendered familiar to him, the fatal Time is at Hand, when our well-inſtructed Youth is now to make his Entrance into the World: But, good GOD, what a World! not that which he has ſo long read, or dreamt of; but a World, new, ſtrange, and inconſiſtent with all his former Notions and Expectations.

He enters this Scene with Awe; and contemplates it with Aſtoniſhment. Vice, he ſees aſſured, proſperous, and Triumphant; Virtue, diſcountenanced, unſucceſsful, and degraded. He joins the firſt Croud, that preſents itſelf to him: A loud Laugh ariſes; and the Edge of their Ridicule is turned on Sobriety, Induſtry, Honeſty, Generoſity, or ſome other of thoſe Qualities, he has hitherto been moſt fond of.

He quits this clamorous Set with Diſdain; and is glad to unite himſelf with *another*, better dreſſed, better manner'd, in all Reſpects more ſpecious and attractive. His Simplicity makes him for ſome Time the Dupe of this plauſible Society: But their occaſional Hints, their negligent Sarcaſms, their Sallies of Wit, and polite Raillery on all that he has been accuſtomed to hold ſacred, ſhew him at laſt, that though he has changed his Company, he has not mended it.

ART. 4. *The Duelliſt. A Poem. In three Books. By* C. Churchill. *Printed for Meſſrs.* Kearſly, Flexney, Coote, Henderſon, Gardiner, *and* Almon. 4to. 49 *Pages. Price* 2*s.* 6*d.*

The Title of this Piece, in a great Meaſure, ſhews the Deſign of it, and the Character of the Author, its Merit, as a Satire. (But leaving Party Character) we ſhall give the following Stanzas as a Specimen of the Author's Genius in Poetry, *&c.*

On Liberty.

Hail, *Liberty!* a glorious Word,
In other Countries ſcarcely heard,
Or heard but as a Thing of courſe,
Without or Energy or Force;
Here felt, enjoy'd, ador'd, ſhe ſprings,
Far, far beyond the Reach of Kings,
Freſh blooming from our Mother Earth;
With Pride and Joy ſhe owns her Birth
Deriv'd from us, and in return
Bids in our Breaſts her Genius burn;
Bids us with all thoſe Bleſſings live
Which *Liberty* alone can give,
Or nobly with that Spirit die,
Which makes Death more than Victory.
Hail thoſe Old Patriots, on whoſe Tongue
Perſuaſion in the Senate hung,

Whilſt

Whilſt They this ſacred Cauſe maintain'd!
Hail thoſe Old Chiefs, to Honour train'd,
Who ſpread, when other Methods fail'd,
War's bloody Banner, and prevail'd!
Shall Men like theſe unmention'd ſleep
Promiſcuous with the common heap,
And (Gratitude forbid the Crime)
Be carried down the Stream of Time
In Shoals, unnotic'd and forgot,
On *Lethe*'s Stream, like Flags to rot?
No — they ſhall live, and each fair Name,
Recorded in the Book of Fame,
Founded on Honour's Baſis, faſt
As the round Earth, to Ages laſt.
Some Virtues vaniſh with our Breath,
Virtue, like this, lives after death.

On the Difficulties of Stateſmen.

Ah me! what mighty Perils wait
The man who meddles with a State,
Whether to ſtrengthen, or oppoſe!
Falſe are his Friends, and firm his foes.
How muſt his Soul, once ventur'd in,
Plunge blindly on from Sin to Sin!
What toils he ſuffers, what diſgrace,
To get, and then to keep a Place!
How often, whether wrong or right,
Muſt he in jeſt, or earneſt fight,
Riſquing for thoſe both Life and Limb,
Who would not riſque one Groat for him!

ART. 5. *An Eſſay on the Study of Literature. Written originally in* French, by Edward Gibbon, *Jun. Eſq*; *Printed for* T. Becket *and* P. A. De Hondt, *in a ſmall Octavo*, 163 *Pages*, *Price* 2*s*.

It conſiſts of 82 Theſes or Poſitions mentioned in the Margin, but there is no Preface nor Table of Contents. The Author has given the Opinion he formed or apprehended would be formed of this Piece with a good Degree of Juſtice at the Concluſion.

Thus have I thrown together a few Reflections, which appeared to me juſt and rational, on the Utility of the Belles-Lettres. Happy ſhould I think myſelf, if, by ſo doing, I ſhould inſpire a Taſte for them in others. I ſhould entertain too good an Opinion of myſelf, if I did not ſee the imperfections of this Eſſay; and ſhould have too bad a one if I did not hope, at an Age leſs premature, and with a more extenſive Knowledge, to be able to correct them. It may poſſibly be ſaid, theſe Reflections are juſt, but hackneyed and trite, or that they are new, but paradoxical. Where is the Author who loves the Critics? The former Imputation, however, will diſpleaſe me leaſt; the Advantage of the Art being more dear to me than the Reputation of the Artiſt.

And as a Specimen of the Author's Stile and Manner of Diſquiſition, we ſhall give the following Extract, *on Liberty and Neceſſity*.

LXXII. There are two Hypotheſes which always have been, and ever will, ſubſiſt. In the one, Man is ſuppoſed to have received from his Creator Reaſon and Will; that he is left to himſelf to put them to uſe, and regulate his Actions accordingly. In the other, he is ſuppoſed incapable of acting otherwiſe than agreeable to the pre-eſtabliſhed Laws of the Deity, of whom he is only the Inſtrument: That his Sentiments deceive him, and when he imagines he follows his own Inclination, he in Fact only purſues that of his Maſter. The latter Notion might be ſuggeſted to the Minds of a People, little removed from a primitive State. Little inſtructed in the Movements of ſo complicated a Machine, they ſaw with Admiration the great Virtues, the atrocious Crimes, the uſeful Inventions of a few ſingular Men, and thought they ſurpaſſed the Powers of Humanity. Hence they conceived, on every ſide, active Deities, inſpiring Virtue and Vice into weak Mortals, incapable of reſiſting their impulſive Influence.

FOREIGN BOOKS.

ART. I. AMSTERDAM *in zyn opkomſt*, &c. that is to ſay, *A Deſcription of the City of* Amſterdam, *wherein is treated of its Origin, Increaſe, Hiſtory, Privileges, Commerce, Buildings, Government eccleſiaſtical and civil, Schools, Bourgeſy and Companies. By* M. John Wagenaar, *Hiſtoriographer of that City*. Large 8vo. 2 Vols. At *Amſterdam*, 1760 and 1761.

The Hiſtory of this famous City had been before touched upon by ſeveral Authors, a Liſt of which M. *Wagenaar* gives in his Preface. The Foundation of *Amſterdam* is aſcribed to *Egbert d'Amſtel*, who lived in the 12th Century. It is known for certain that the Seigneurs of *Amſtel* had a fortified Caſtle on the very Spot where *Amſterdam* now ſtands; but no mention was made of a Place called *Amſterdam* before 1275, and that on Occaſion of a Jettee, or Dam, in the *Flemiſh* Language, conſtructed in that Place; and the Name of *Amſtelredam* was not altered into that of *Amſterdam* till 1297. Since that Epoch, when it came under the Government of the Earls of *Holland* it encreaſed daily in Grandeur, Wealth and Power. About the End of the 13th, or the Beginning of the 14th Century it was ſurrounded with Ditches, and ſecured by Towers and Fortifications. It is preſumed that it was ranked among Cities in 1300 or 1301. However, it received the Name of a City for the firſt Time, by Letters of *William* III. Earl of *Holland*, in 1323. Soon after it obtained municipal Laws. In 1370 we find it placed among the principal trading Cities of *Europe*, which about that Time entered into a Treaty of mutual Alliance. It continued improving in all Reſpects in the 15th Century; but particularly in the 16th and 17th Centuries, it received ſuch additional Advantages, as have equalled it with moſt of the fineſt and greateſt Cities in *Europe*. Its Boundaries frequently altered and always extended, were not fixed as they now remain, till 1657. M. *Wagenaar* proved in 747 the Number of Inhabitants were about two hundred thouſand. But this Calculation has been ſince criticiſed in a particular Treatiſe, wherein the Number is encreaſed to about three hundred thouſand.

ART.

ART. 2. *Tactique Navale, ou Traité des Evolutions et des Signaux, avec figures en taille douce*, that is, *Naval Tactics, or a Treatise on Evolutions and Signals, illustrated with Copper Plates, by M le Vicompte Morogues.* Paris 1763, 4to. We shall give an Account of this useful Work another Time.

A CHRONOLOGICAL MEMOIR *of* OCCURRENCES.

Summary of the general War in 1756, *to the Conclusion of the general Peace in* 1763.

TILL the Year 1755, all *Europe* was in a State of Tranquility: But then the Distrusts which crept into the Discussions of the *French* and *English*, concerning their Possessions in *America*, foretold an approaching storm, which would overturn the old Balance of Power, and the general system of *Europe*.

In 1756, the War broke out on all Sides, and was openly declared between *Great Britain* and *France*. His *Britannic* Majesty entered into a Convention of Neutrality with the King of *Prussia*; and the *French* Monarch concluded a Counter-Convention with the Empress-Queen of *Hungary*. This produced the War in *Germany*, wherein the Empress Queen was assisted by the Army of the Empire, the Empress of *Russia*, the *French* King, the King of *Sweden*, and the King of *Poland* as Elector of *Saxony*. The King of *Prussia* was powerfully assisted with *British* Troops, and supplied with *British* Subsidies; which also sent "an Army of Observation into the Field," composed of the allied Troops of *Hanover*, *Hesse*, *Brunswick-Wolfenbuttle*, *Saxe-Gotha* and *Lippe-buckeburg*.

In 1757, a Convention was concluded at *Closter-Seven*, under the Mediation of the King of *Denmark*, between the *French* Army, commanded by the Marshal Duke *de Richlieu*; and the Army of the Allies commanded by his Royal Highness the Duke of *Cumberland*: But the *Hanoverians* soon broke that Convention; and, with the other Allies, formed a new Army under the Command of Prince *Ferdinand* of *Brunswick-Wolfenbuttle*, who, in 1758, drove the *French* out of *Hanover*, when they were commanded by the Count *de Clermont*: So that of 120,000 *French*, which entered *Germany*, not 40,000 returned to the *Rhine*.

From that Time, two distinct Wars subsisted; one of *France* with *Great Britain*, and which in the Beginning had nothing in common with *Germany*; and the other which the King of *Prussia* waged against the Empress-Queen, and in which his *Britannic* Majesty was interested as an Ally to *Prussia*, and the *French* King as an Ally to *Austria*.

When the Capitulation of *Closter-Seven* was broke, the Electoral Army of *Hanover* was considered as a *British* Army, and Prince *Ferdinand* as a *British* General, though he was not naturalized: The Elector of *Hanover*, the Duke of *Brunswick*, the Landgrave of *Hesse*, their Forces and their Countries, were blended together in the Cause of *England*; so that the Hostilities in *Westphalia*, and *Lower Saxony*, had the same Object as the Hostilities in *America*, *Asia*, and *Africa*; that is, the Disputes subsisting between the two Crowns concerning the Limits of *Acadia* and *Canada*.

In 1759, the Courts of *London* and *Berlin* began a pacific Negociation with the Courts of *France*, *Vienna*, and *Russia*; which was soon broke off: But

But, in 1761, the *French* renewed the Negociation, and *Augſburg* was propoſed as the Place of Congreſs. Prince *Gallitzin*, the *Ruſſian* Ambaſſador at the *Britiſh* Court, opened the *French* Propoſals to the *Britiſh* Miniſtry, by whom the *Uti Poſſidetis* was rejected. M. *Buſſy*, and Mr. *Stanley* embarked, and reimbarked, from *Calais* and *Dover*; which finiſhed the ſecond Negociation.

The War between *Great Britain* and *Spain*, as alſo between *Spain* and *Portugal*, broke out in 1761; and the *Britiſh* Arms were ſucceſsful in all Parts of the World the following Year. It was then neceſſary to put a Stop to the Effuſion of human Blood, by wreathing the Laurel and the Olive round the Sword and Spear. The Duke of *Bedford* was ſent Plenipotentiary to *Paris*; and the Duke *de Nivernois* came Plenipotentiary to *London*, whereby a third pacific Negociation was began; which terminated in a full Treaty of Peace; and the Conſequence was, that Peace became univerſal.

The Kings of *Great Britain*, *France*, and *Spain*, agreed upon the PRELIMINARY ARTICLES of Peace; which were ſigned, at FONTAINBLEAU the 3d of *November*, 1762; whereby it was agreed, "That ſincere Friendſhip ſhould be re-eſtabliſhed between them, in all Parts of the World." Theſe Preliminary Articles were productive of a DEFINITIVE TREATY of Peace between the three Monarchs, in which the King of *Portugal* was alſo included; as were the *Britiſh* and *French* Allies in *Germany*. This DEFINITIVE TREATY was concluded at PARIS, on the 10th of *February*, 1763; whereby *Great Britain* obtained many valuable Acquiſitions for herſelf, and Security, if not Indemnity, for her *German* Allies; though long will it be remembered, at the enormous Expence of Sixty Millions Sterling, thus profuſely diſſipated in a War of ſix Years.

We will not enter into the Diſpute, whether the Peace, in Regard to *Great Britain*, was either "honourable, or inadequate?" But, by the Concluſion of this general Peace, the Tranquility of every Part of *Europe* was perfectly eſtabliſhed: For a DEFINITIVE TREATY of Peace was alſo concluded between the Empreſs-Queen and the *Pruſſian* King, at *Huberſburgh*, on the 15th of *February*, 1763; in which they included all their Friends and Allies, and his *Pruſſian* Majeſty thereby preſerved *Sileſia* to himſelf, which was the Prize contended for in *Germany*.

His Majeſty has declared, that "The Re-eſtabliſhment of the public Tranquility, upon Terms of Honor and Advantage to his Kingdom, was the firſt Object of his Reign." That ſalutary Meaſure has received the Approbation of his Parliament; ſo that our principal Care ought now to be employed in improving the valuable Acquiſitions which we have made, and to cultivate the Arts of Peace.

Europe is again in Tranquility; but nothing can be relied upon from any Syſtem of Peace. *Great Britain* may again have *Auſtria* for an Ally; and *France* may be once more allied to *Pruſſia*: *Germany* may have inteſtine Commotions, eſpecially on the Election of a King of the *Romans*: *Ruſſia* may renew her old Quarrel with *Sweden*: *Poland* may ſuffer, as in 1733, for a Succeſſor to the Throne; while even the Grand *Turk* intereſts himſelf in the Succeſſion of *Courland*. *Spain* and *Portugal* are reconciled: But the Pride, or Avarice, of the Court of *Madrid*, may create a new Diſturbance in *Italy*. This ſhort Sketch of the preſent Syſtem of *Europe* will be fully elucidated in our next Number.

COUNTRY NEWS.

Worceſter, Eveſham, Jan. 24. IN the dreadful Storm of Wind and Rain on Saturday Sevennight, four Pieces of Paſture Land at Grafton, called by the Name of *Bullines*, by Eſtimation 32 Acres, ſlipped from its Foundation, and, though very rich Land before, is utterly ruined; the Trees which ſtood on it, 30 Feet high, you can but juſt ſee the Tops of them. It has left in the Room of the Soil, an Oaker-coloured Earth, moſtly in ſmall Balls about as large a Muſket Bore, but very light. The Ground does not ſeem to be ſettled yet. We have never known ſuch high Floods in theſe Parts, and we very much dread a Scarcity: Proviſion of moſt Kinds very dear.

LONDON.

Jan. 16 THE Marriage Cerremony between her Royal Highneſs the Princeſs Auguſta, and the Prince of Brunſwick was performed in the Grand Council Chamber, at St. James's, by his Grace the Arch-Biſhop of Canterbury in the Preſence of a great Number of Nobility.

St. James's, Jan. 20. This Day the Right Hon. the Lord Mayor, Aldermen, and Commons, of the City of London, in Common Council aſſembled, waited on his Majeſty, and being introduced to his Majeſty by Earl Gower, Lord Chamberlain, made their Compliments in the following Addreſs, which was ſpoke by James Eyre, Eſq; the Recorder.

To the King's moſt excellent Majeſty,

The humble Addreſs of the Lord Mayor, Aldermen, and Commons of the City of London, in Common Council aſſembled.

May it pleaſe your Majeſty,

GRaciouſly to accept our ſincere and dutiful Congratulations on the Marriage of your Majeſty's eldeſt Siſter her Royal Highneſs the Princeſs Auguſta, with his moſt Serene Highneſs the Hereditary Prince of Brunſwick Lunenburgh. It was with the utmoſt Joy and Satisfaction, that we ſaw your Majeſty's Wiſdom yield to the Propoſals for an Alliance with a Proteſtant Family ſo illuſtrious; and that a Lady, whoſe amiable Character is not more exalted by the Dignity of her high Birth than her private Virtues, was deſtined to be the happy Partner of a Prince, whoſe eminent and diſtinguiſhed Services, during a ſucceſsful and glorious War, will ever be remembred by every Friend of true Religion and publick Liberty.

Your Majeſty's faithful Citizens of London have ſeen, with Gratitude, the Conſtitution of this Country, ſettled and eſtabliſhed by our great Deliverer King William, maintained and improved by the Illuſtrious Houſe of Brunſwick: And therefore they cannot ſufficiently applaud your Majeſty's great Wiſdom and Goodneſs, in further ſtrengthening it by this happy Alliance.

May this Marriage anſwer your Majeſty's warmeſt Wiſhes and Expectations; and may the Prince and Princeſs be bleſſed with an Offspring truly worthy of ſo royal and illuſtrious a Deſcent.

Permit us to aſſure your Majeſty of our firm Attachment to your Majeſty's ſacred Perſon and Government; and of our conſtant Endeavours, within our Sphere, to contribute to the Happineſs and Proſperity of your Majeſty's Reign. Signed by Order of Court,

 James Hodges.

To which Addreſs his Majeſty was pleaſed to return the following moſt gracious Anſwer.

My Lord Mayor and Gentlemen,

I return you my Thanks for your dutiful Congratulation on the Marriage of my Siſter the Princeſs Auguſta, with the Hereditary Prince of Brunſwick Lunenburgh; and am glad that this happy Alliance gives ſuch general Satisfaction.

I receive, with Pleaſure, your Aſſurances of Duty and Affection to my Perſon and Government. The City of London may always depend on my Favour and Protection.

They were all received very graciouſly, and had the Honour to kiſs his Majeſty's Hand.

25. This Evening at four o'Clock, his Serene Highneſs the Prince of Brunſwick, and his Conſort, ſet out from Leiceſter Houſe in their Way to Harwich, and the next Night lay at the Earl of Abercorn's Seat at Witham.

Some Account of the Military Actions of the Hereditary Prince of BRUNSWICK.

When the Hanoverians reſumed their Arms, in Conſequence of the Infraction, on the Part of the French, of the Convention of Cloſter Seven, Prince Ferdinand of Brunſwick, Brother to the Reigning Duke of that Title, was appointed Commander in Chief of the Army of the King of Great Britain. In this Army the Hereditary Prince entered into Action in his twenty-third Year, and diſtinguiſhed himſelf in many Engagements.

Feb. 23, 1758. His Serene Highneſs ſtormed the Town of Hoya, Capital of the County of that Name, and obliged the French Commandant, Count de Chabot, to ſurrender the Place by Capitulation, after a Loſs on the Part of the latter of 670 Men.

June 23. At the Battle of Crevelt, in which the French Army, under the Count de Clermont, was entirely routed, the Hereditary Prince, at the Head of two Battalions of Grenadiers made an Attack on the French, who were in a neighbouring Wood, and maintained a Fire for two Hours and an half without ceaſing, till the Enemy were thrown into Confuſion, and entirely defeated. It was in this Battle that Count Giſors, only Son of Marſhal Belleiſle, was mortally wounded. He was Son-in-Law to the Duke of Nivernois, the late French Miniſter at this Court.

July 29. He diſlodged the French from Bruggen, and took Poſſeſſion of the Town.

Aug. 3. He attacked a ſtrong French Poſt at Wachtendonk, and drove the Enemy away with the Loſs of only two Grenadiers.

April 1, 1759 He took Poſſeſſion of Meiningen, and made two Battalions of the Cologn Troops Priſoners. He reached Waſungen the ſame Day, took it, and made Priſoners the Battalion of Nagel. He likewiſe obliged Count d'Arberg, who was coming to its Relief, to retire.

5, He repulſed a Body of Auſtrians from Smalkalden and Thuringia.

July 28 He diſlodged the French from Lubeke.

Aug. 1. He made an Attack on 8000 French at Thornhauſen, under M. de Briſſac, whom he routed, and took five Pieces of Cannon, and near 2000 Priſoners.

17. He diſlodged a French Corps under M. d'Armentiers from Wolfhagan.

Sept

Sept. 2. He ſurprized a Party of French at Neder Weimar, took two Cannon, and ſeveral Priſoners, without any Loſs.

Nov. 30. He attacked a Body of French at Fulda, under the Duke of Wurtembeg, cut ſeveral of them to Pieces, and took the reſt, with two Cannon, two Colours, and the Baggage.

Dec. 25. He arrived with his Troops at Chemnitz, in Saxony, and

Jan. 12, 1760, Was at Freyberg with the King of Pruſſia. Having continued a little Time in Saxony, he left that Electorate, and with his Army,

Feb. 16, Paſſed the Frontiers of Thuringia.

June 28. He arrived in Heſſe, after ſeveral ſucceſsful ſkirmiſhes.

July 10. He engaged 10,000 French at Corbach, but being inferior in Men and Artillery, it became neceſſary to make a Retreat, which was accompliſhed with ſome Loſs. In this Action he received a ſlight Wound in his Shoulder

16. He gave Battle to the French under Gen. Glaubitz, at Emſdorff, and took two Battalions, and the Commander, Priſoners.

22. He retook Dillenburg, and made the Garriſon Priſoners.

Aug. 1. In the Battle of Warburg he attacked and forced the Enemy's Flank, and drove them to the Town.

5. He made an Attack in the Night upon Ziegenberg, and brought off 40 Officers and 300 Men.

Sept. 30. He paſſed the Rhine, after having ſcoured the Country, and taken Rees and Emmerick.

Oct 16. He attacked M. de Caſtries, and was engaged from five in the Morning till nine at Night, but was obliged to retire. His Highneſs received a ſlight Wound in his Leg, and his Horſe was killed under him.

March 2, 1761 He diſlodged the French from Budingen.

May 20. He routed ſeveral French advanced Poſts at Weſel, &c.

July 16. In the Defeat of the French at Hohenover, his Highneſs was preſent, and formed Part of the Right Wing.

20. He had a ſmart Skirmiſh with the French, in which his Brother, Prince Albert Henry, received a Wound, of which he died, on the 8th of Auguſt at Ham.

Nov. 13. He routed a large French Detachment of Cavalry under M. de Cloſen, near Katlenbourg.

April 19. 1762. He took the Caſtle of Arenberg, the Garriſon of which, conſiſting of nine Officers and 231 Men, commanded by M. Muret, ſurrendered at Diſcretion.

June 24. He was preſent at the Battle of Grabenſtein, when the French were defeated, with the Loſs of near 5000 Men.

July 24. He arrived at Mark, near Ham, after diſlodging ſome French Detachments from Oſnabrug, and harraſſing the Prince of Conde in his March.

Aug. 25. Being on a March with ſome light Troops near Frankfort on the Main, he fell in with the Main Body of the French, and loſt 30 Men and three Cannon.

31. He engaged Count Stainville, near Friedberg, in which, after a brave Reſiſtance, he was unſucceſsful, and received a Muſket Ball in his Side, which made a deep Perforation. He was conveyed ſucceſſively to Homberg, Fritzlar, and Munden, at which laſt Place the Wound was opened

opened. This Operation, which was very painful, was ſucceeded by a Fever, occaſioned by the working of a Splinter; but in about three Weeks he was declared to be out of Danger. His Highneſs was attended by Dr. Attoff, the King's Phyſician; and was viſited, during this Confinement, by his Father the reigning Duke.

This was the laſt Action in which the Hereditary Prince was engaged; as in leſs than three Month after this Event Hoſtilities ceaſed.

*** In our Magazine for *February* will be given a beautiful Copper-Plate Print of their Serene and Royal Highneſſes the Prince and Princeſs of Brunſwick, engraved from original Paintings.

MARRIAGES.

Jan. 11. Major Berney Brumpſten, to Miſs Gardner, only Daughter of Councellor Gardner, with a Fortune of 20,000l. — Mr. Hannar, Maſter of the Biſhop Blaze's Head, a Publick Houſe in the Mint, to Mrs. Kempton, at the Cock, near Temple Bar, with 2000l. Fortune, her Huſband having been dead only two Months. — John Hill, of Bedford, Eſq; to Mrs. Eliz. Cox, a Widow Lady, with a Fortune of 10,000l.

DEATHS.

Jan. 1. Francis Dullaſon, Eſq; in Swallow-ſtreet. — James Gunner, Eſq; of Cheſter, in Bolton-ſtreet, Piccadilly. — 3. Abraham Shaxford, Eſq; in Tottenham-court Road. — 4. John Tempeſt, Eſq; Member for the City of Durham, at his Seat at Sherborn. — John Howell, Eſq; of Richmond in Surry, late of Shoreditch. — 11. John Rogerſon, Eſq; at Lambeth. — 15. George Towers, Eſq; at Putney. — 18. Anthony Huntley, Eſq; a Ruſſia Merchant. — The Rev Mr. Zeph. Peirſe, Rector of Eaſt and Weſt Thorndon, near Brentwood in Eſſex, aged 78. — Abraham Bradbury, Eſq; formerly Barriſter at Law, at Brumpton, aged 80. — 20. In Thrift-ſtreet, Soho, John Greave, Eſq; of Kent. — 21. At Chelſea, Iſaac Cartwright, Eſq;

BANKRUPTS.

Peter How, John Younger, and John Wilkinſon, all of Whitehaven, in the County of Cumberland, Merchants and Co-partners in the Manufacturing of Tobacco and Soap — William Swinton, late of the Pariſh of St. Martin in the Fields, in the County of Middeſex, Dealer. — William Towſey, of Fenchurch-ſtreet, London, Hoſier. — John Wilkinſon, of Whitehaven in the County of Cumberland, Merchant. — John Atkinſon, late of Liverpool, Merchant. — John Younger, of Whitehaven, in the County of Cumberland, Merchant. — Timothy Bennet, of the City of Norwich, Dealer — Thomas Maynard, of Cateaton-ſtreet, London, Merchant — Gabriel Griffith, and Robert Roſs, both of Whitehaven, in the County of Cumberland, Braſiers, Merchants, and Co-partners. — James Walker, late of New York, but now of London, Merchant. — John Holme, late of Carliſle, Cumberland, Scrivener — Joſeph Holding, of Fleet-ſtreet, London, Tobacconiſt and Snuff-maker. — George Doncaſter, of Nottingham, Grocer. — William Willſon, of the Pariſh of Stepney, Middleſex, Twine-ſpinner. — James Forbes, of Size-lane, London, Merchant. — Richard Harle and William Harle, now or late of the Liberty of Eaſt Smithfield, Grocers and Confectioners, and Partners. — John Roſs, of Dock-head, Surry, Brewer. — John Chittenden, of Hawkhurſt, in Kent, Merchant.

A MACHINE to disengage Horses from a COACH when they run away.

Fig. 1.

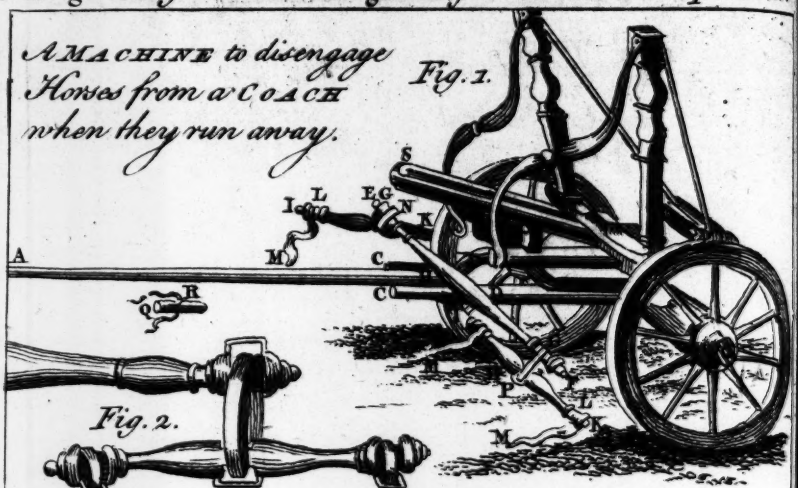
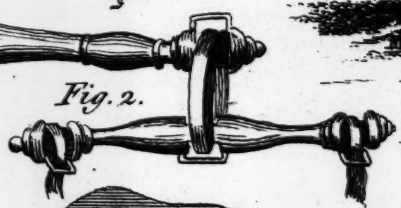


Fig. 2.



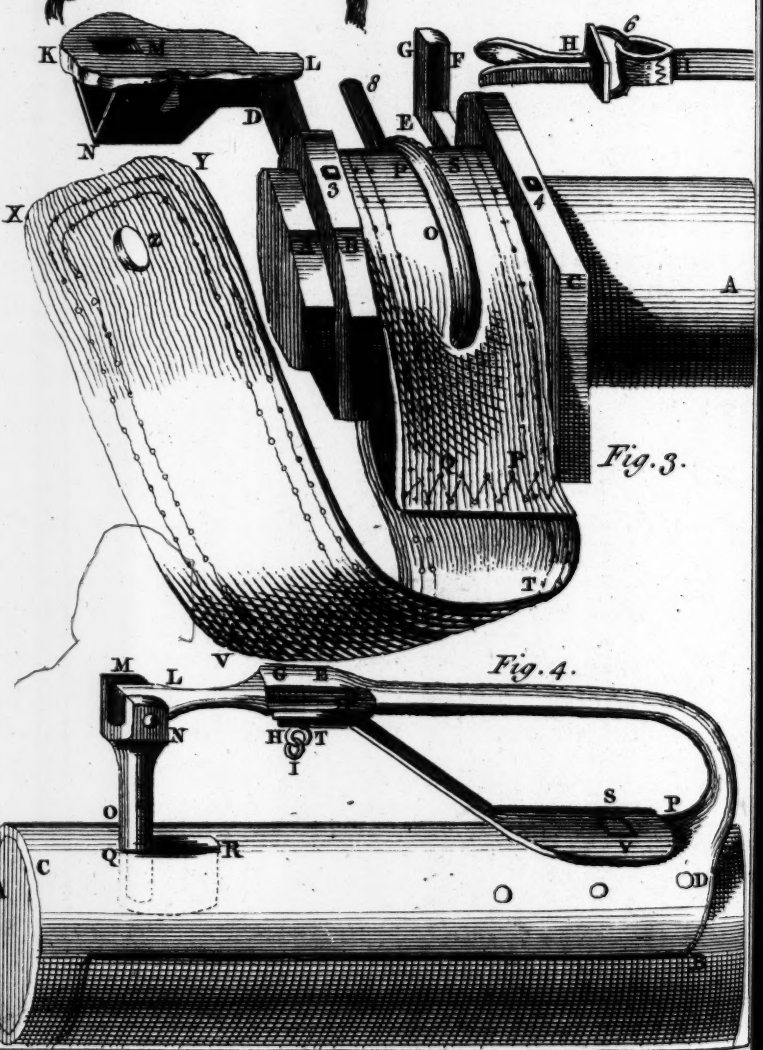


Fig. 3.

Fig. 4.

The GENERAL MAGAZINE,
For *FEBRUARY*, 1764.

MECHANICS.

Deſcription and Uſe of a Machine to diſengage the Horſes, abſolutely and at once, from a Coach, or other four Wheel Carriage, when they are Head-ſtrong, and run away.

SUCH a Number of Accidents happen daily from Horſes running away with Carriages, that it is thought ſome eaſy, expeditious, and effectual Method of diſengaging them under ſuch dangerous Circumſtances, may be no inconſiderable Piece of Service to the Public: But previous to the Deſcription of the Machine invented for this Purpoſe, it will be neceſſary to explain a Figure which repreſents the whole fore Part of a Coach, or other four-wheel Carriage upon that Principle, called the Fore-carriage, in order to ſhow what is termed the Splinter-Bar, with all the Parts that depend upon it, the Place where it is faſtened, and its Uſe.

A B (Fig. 1.) is the Pole, of which the fartheſt Extremity from the Carriage, which is furniſhed with a Hook Q R, is repreſented underneath. C D, C D, are the two Futchels. E F the Splinter-bar, faſtened upon the two Futchels, with two iron Screws. N N are the Cramps of the Splinter-bar, which go into it, and are faſtened at the Mouldings; they hinder the two Leather Rings G H, G H, which paſs within, as in the two Cramps P P of the Bars, from getting out of the End of the Splinter-bar. L K, L K, are the two Bars ſuſpended, as we ſee, at the two Ends of the Splinter-bar, by Means of the two Leather Rings; and in the Middle of the Bars are the Cramps P P, which hinder them from ſlipping in the Leather Rings. L M are the T-races with which the Horſes draw the Coach; they are fitted at each End of the Bars in ſuch a Manner, as to embrace them the more ſtrongly, in Proportion as the Horſes draw with more Effort. S the Foot-board.

Fig. 2. repreſents the End of a Splinter-bar, more large, with the Bar which is faſtened to it by the Leather Ring, to ſhew all the ſmall Parts of it the better.

This Explanation of the fore Carriage being judged ſufficient, the intended Machine is applied at each Extremity of the Splinter-bar, which is furniſhed with two Mouldings, two or three Inches diſtant

from each other, and raiſed about half an Inch above the Body of the Splinter-bar, which is cylindrical between theſe two Mouldings. It is between theſe two Mouldings that the Leather Ring of the Bar is placed; it is made of ſeveral Leather Thongs, ſewed together, the two Ends of which are joined by a Buckle: In this Manner the Leather Ring is drawn into Length; and at one of its Extremities embraces the End of the Splinter-bar and the other at the Middle of the Bar.

One of the Ends of the Splinter-bar is repreſented by the Letters A A (Fig. 3.); of the two Mouldings, which are there, that which is neareſt the Extremity of the Splinter-bar has been ſhaped to eight Angles, that the End of the Splinter-bar may be the leſs diminiſhed: There are four of them large, and four ſmall, to give a greater Seat to the Sides of the Ferril, which ſhall be fitted to it; the Figure that has been given to this Moulding muſt be inſcribed in the End of the Splinter-bar, which bears the Leather Rings of the Bar, that it may enter into the irong Ring O. This Moulding being thus made Octangular, has two of its great Sides placed vertically, one towards the Coach, and the other towards the Horſes, the two others are placed horizontally, one above and the other below; it is furniſhed with an iron Ferril B, which is alſo octangular. From the Face of this Ferril, which is towards the Coach, there comes out perpendicularly an iron Pin D, about an Inch and a half long. The Extremity of the Pin D is rounded like a Pivot, that it may enter into a round Hole at the Extremity L, of the Piece of Iron L K, which may be called the Traverſe, and be rivetted in ſuch a Manner into it, that this Traverſe, which is perpendicular to the Pin D, may move circularly in it.

The Traverſe L K, about four Inches long, and ten Lines broad in the Place where it is moſt ſo, has, towards the Extremity K, a Hole M, which pierces through, to let the Bit of Iron paſs, when it is preſſed upon it. The Piece of Iron F, which is an Inch and a half high, is raiſed perpendicularly upon a Pin E, which being parallel to that marked D, riſes from the Middle of one of the vertical Faces of the Sort of Ferril C, namely, from that which is towards the Coach; the Moulding to which this Ferril belongs has been made quadrangular, ſo that two of its Faces are vertical, and two horizontal, and the Ferril C is circumſcribed to the Part of the Splinter-bar, between the two Mouldings.

Acroſs the two upper horizontal Faces B and C of the two Ferrils, as well as of the oppoſite Faces, and acroſs the Splinter-bar, paſs two Screws, which have their Heads marked 3 and 4, and enter into the lower horizontal Faces, which are oppoſite to B and C, to fix the two Ferrils B and C to the Splinter-bar A A. The Thong P Q R S T V X Y is the leather Ring of the Bar, it embraces at one of its Ends that Part of the Splinter-bar which is between the two Ferrils B and C, becauſe the Extremity P Q is ſewed to the under Part; it is ſlit in the

the Middle of the Space between the two Ferrils, to receive in its Thickneſs the iron Ring O: This Ring embraces the Splinter-bar in this Place, and has a Pin 8 which is perpendicular to it, and enters into the Hole Z marked toward the Extremity X Y of the Leather Ring of the Bar.

When the Tongue 8 is entered into the Hole Z of the Leather Ring, if you paſs the Bar into the ſame Ring, at the Place T V, you will make the Ring O turn, and the Tongue 8 will come before; it is to hinder it from coming before, that we ſhall lower the Traverſe L K upon the Pin E, and make the double Key H enter into the Hole G, which goes through the Piece F; but as the Dirt might fall between the Plates of the Key H, and hinder it from being drawn back, there is faſtened upon the Traverſe L K, the Box N, the Entrance of which will be ſhut by the Head of the Key when it is put in, ſo that nothing can get into the Box.

We ſee by the Conſtruction of the Machine, that the Horſes, which draw the Bars, make a continual Effort to raiſe, with the Tongue 8, the Traverſe L K, which cannot get looſe from the Piece F, becauſe of the Key H, which paſſes through it. The other Bar is faſtened in like Manner at the other End of the Splinter-bar: And now there remains nothing but to ſhew how we may draw, all at once in the ſame Inſtant, the Key H, and that which is at the other End of the Splinter-bar.

To do this we muſt take a leather Strap or Thong ſlit in one Part of its Length, one of the Ends of which paſſes over one Pulley, and the other over another; theſe two Pullies are placed horizontally, and are in a double Block, the Gudgeon of which enters perpendicularly into the Middle of the Length of the Splinter-bar, and into the Face which is towards the Coach. The two Ends I of this Strap, after having paſſed over the Pullies, embrace the Rings 6, which are behind the Heads of the Keys, and there theſe two Ends, or theſe two Parts of the Slit End of the Strap are ſewed together; the other End of the Strap, which has not been ſlit, paſſes under the Foot-board and through the Axle-tree of the little Wheels, and is faſtened to a ſilk Cord, which enters the Coach at a Hole made in the Middle of the fore Part, like that through which the String paſſes to give the Coachman Notice when to ſtop.

It is eaſy to ſee, that if the Perſon in the Coach pulls the String, while the Coach is going on, he will diſengage the Pins H from the Holes G; that, at the ſame Time, the Tongues P will raiſe the Traverſes L K; that the End of the Leather Ring X Y will come off from the Tongue 8, and, conſequently, that the Bars will be no longer faſtened to the Splinter-bar; and as the Bars are no longer faſtened, the Coach can no longer be drawn by the Horſes, becauſe they are only faſtened by this Part; having ſubſtituted a Spring inſtead of the little Strap to hold the great Leather Rings engaged in the Iron Hook, placed at the End of the Pole; theſe Leather Rings lower this Spring

when the Horſes continue to go on, and the Bars are no longer faſtened to the Splinter-bar as ſhall be explained at greater Length, when we come to conſider the other Advantages of this Spring. The Convenience of this Machine is, that it may very eaſily be taken off, from one Coach and put upon another: For you need only undo the two Screws 3 and 4, and unſew and ſew again the two Straps, which hold to the two Keys, becauſe it is ſuppoſed, that Care will be taken before the two Mouldings at the two Ends of the Splinter-bar are made angular, as has been obſerved, to faſten a double Pulley to the Middle of the Splinter-bar; and to make a Hole through the Axletree of the little Wheels of all Coaches, to which we would have the Machine applied, and they will ſerve as uſual when the Machine is not on, becauſe we may paſs into the Holes of the Splinder-Bar, where the two Screws 3 and 4 enter, the Pins of a Cramp which ſhall be furrowed at the End to ſcrew Nuts upon them, to hold the Cramp faſt to the Splinter-bar; and by this Means hinder the Leather Rings of the Bar from ſlipping off the End of the Splinter-bar, as is done in all Coaches.

It is not enough to ſhew the Way to prevent Accidents when two Horſes run away, but we muſt alſo prevent them, when there are four, with a Poſtillion, or without one, and when there are ſix; and when the Poſtillion has been thrown under the Horſe that he rode, or when he cannot govern the Horſes. When there are four Horſes to a Coach, the two foremoſt are faſtened either with Traces to the Wheel Horſes, or to two Bars faſtened to a Splinter-Bar, by two Leather Rings, like thoſe next the Coach: This Splinter-bar, to which the two fore Horſes are faſtened, is encompaſſed in the middle Part by a Leather Ring, in which there paſſes another, where the End of the Pole enters, which has a Hole to receive an iron Pin, which is faſtened to the End of the Hook, with a little Slip of Leather; and againſt this Pin the Leather Ring reſts, into which the Pole enters: In this Manner, the fore Horſes draw the Coach by the End of the Pole; but when, inſtead of four Horſes, they put ſix, they only faſten the two firſt to the two ſecond with Traces; and ſo the four firſt Horſes are faſtened to the Coach only by the End of the Pole.

In order therefore to hinder the Accidents which might happen, if four or ſix Horſes were to run away, we muſt find a Method to detach, all at once, the Leather Ring which is faſtened to the End of the Pole: This muſt be done by Means of another Machine which we ſhall deſcribe, after having obſerved, that the Wheel Horſes have each of them faſtened to the breaſt Leather of their Harneſs, a great long Leather Ring, in which another Leather Ring is received; and into this laſt Ring the End of the Pole enters quite to the Bottom of the Hook.

The End of the Pole is repreſented by A B; (Fig. 4.) and C D E repreſents the Hook which is applied to it, and differs from the common ones only in that the End E is flatted, having a Slit K F in its Thickneſs, and pierced quite through with a ſquare Hole G. In this Slit

K F

K F between the Extremity F K of a Piece of Iron F K L, which turns upon a Hinge in the Piece of Iron M N O, this Piece enters perpendicularly into the Pole almoſt to the Middle, becauſe the Plate of the Hook, and the Pole are perforated with a Hole Q R rounded at the two Ends, of which the Breath is equal to the Diameter of the Pin M N O at the Bottom, and the Length to the Quantity with which the Pin M N O enters the Pole; it is againſt this Pin that the Ring reſts, which holds the Splinter-bar to which the fore Horſes are faſtened.

Therefore to detach the fore Horſes from the End of the Pole, we need only faſten the Piece of Iron L K F to the End of the Hook E, ſo that it may eaſily undo: This may be done by Means of a Spring S T, of which the End S is held faſt to the Plate of the Hook by the ſquare Rivet V, and the other End T, which is of the Breadth of the End of the Hook E, is perforated by a long Slit, in which there paſſes a Ring H which holds the Extremity of a ſquare iron Pin which paſſes through the two thickneſſes of the End of the Hook, and of the Part F K of the Piece F K L and fills the ſquare Hole G. The iron pin H G is inſtead of the Slip of Leather which holds to the End of the Hook the iron Pin which paſſes into the End of the Pole. Another Ring I is engaged in the Ring H, or a little Slip is tied in a Knot to it, that where the Spring S T is lowered, it may make the Pin H G come out of its Hole.

It has been ſaid, that there were two Leather Rings in which the End of the Pole went quite to the Bottom of the Hook, that is, they occupy the Place S P: But as the End of the Pole cannot be made to go into theſe Rings without lowering the Spring; ſo they cannot get out, without lowering it, and alſo diſengaging at the ſame Time the Pin H G, which no longer retaining the Piece F K L O in the End of the Hook, it will be carried away by the Leather Ring which reſts againſt it, and the fore Horſes will go away with the Splinter-bar.

We may ſee by this Conſtruction, that if by the firſt Machine we detach the two Horſes from the Pole, they cannot go forward without lowering the Spring S T, and at the ſame Time detaching the Splinter-bar from the End of the Pole, and conſequently the Horſes which are faſtened to it.

Institutions *of* Natural History.

NATURAL Hiſtory, in general, is defined a Diſcription of the natural Products of the Earth, Water, or Air; together with ſuch extraordinary Phænomena as at any Time happen in the material World; as Meteors, Monſters, *&c.* But, in a more preciſe and reſtrained Senſe, the Objects of Natural Hiſtory are the three Kingdoms of Nature, as they are called, or the Animal, Vegetable and Foſſil Kingdoms.

The Branch of Natural Hiſtory which treats of the Animal Kingdom

dom is called ZOOLOGY, or the Hiſtory of Animals; that which regards the Vegetable Kingdom is called BOTANY, or the Hiſtory of Plants; and that which treats of the foſſil Kingdom is termed by Naturaliſts MINERALOGY, or the Hiſtory of Minerals, or Foſſils; and, in like Manner, the Hiſtory of Meteors, *&c.* is termed METEOROLOGY, *&c.*

Of ZOOLOGY, *or the* ANIMAL KINGDOM.

A natural Diviſion of the Subjects of ZOOLOGY, as arranged by the celebrated Dr. *Linnæus*, affords ſix ſeveral Claſſes or Families. 1. The QUADRUPEDS, or that Claſs of Land Animals, with hairy Bodies and four Limbs or Legs proceeding from the Trunk of their Bodies; add to this that the Females of this Claſs are viviparous, or bring forth their young alive, and nouriſh them with Milk from their Teats. 2. The BIRDS, or that Claſs of Animals the Characters of which are, that their Body is covered with Feathers, and that they have two Wings, two Legs, and a Bill of a firm bony or rather horny Subſtance; add to this, that the Females are all oviparous. The Knowledge of Birds, of the Orders and Genera into which they are ſubdivided, and of their Natures, Uſes, Figures, *&c.* conſtitutes a particular Science under the Name of ORNITHOLOGY. 3. The AMPHIBIOUS ANIMALS, which live part of their Time in the Water, and part of it on Land. The diſtinguiſhing Characters of this Claſs are, that they have either naked or ſcaly Bodies, and ſharp pointed fore Teeth; but without any Grinders, or *dentes molares*, to which may be added, that they have no radiated Fins. 4. The FISHES, the Characters of which are, that they have no Feet, but always Fins; add to this, that their Body is altogether naked, or covered with Scales; and that they are aquatic Animals, which live moſtly if not always in Water. The Knowledge of Fiſhes conſtitutes a particular Science called by Writers of Natural Hiſtory ICHTHYOLOGY. 5. The INSECTS, whoſe Bodies are neither regularly covered with Hair, Feathers, or Scales, as in the generality of other Animals; but either with a hard and, as it were, horny Subſtance, or with a ſoft or tender Skin; and of which the far greater Part, that is, all the Inſects with a hard covering to their Bodies, have on their Heads *antennæ*, otherwiſe called Horns, and Feelers; and 6. The WORMS, the diſtinguiſhing Character of which is, that they have the Muſcles of their Body affixed to a ſolid Baſis.

Claſs 1. *Of* QUADRUPEDS.

The Claſs of Quadrupeds, *Linnæus* has diſtinguiſhed into ſix Orders. 1. The ANTHROPOMORPHA, or that order of Quadrupeds which have the Form of the Human Species. 2. The FERÆ, or ſuch Quadrupeds whoſe fore Teeth are ſix each Way, and whoſe canine Teeth are longer than the others. 3. The AGRIÆ, an Order of Quadrupeds which have no Teeth, and whoſe Tongue is very long and cylindric. 4. The GLIRES, an Order diſtinguiſhed by having the fore Teeth only two in Num-

Number, and thoſe prominent. 5. The JUMENTA, the Characters of which Order are, that the Teeth are few in Number, and diſpoſed in an irregular Manner; often they differ from one another extremely in Size and Figure; and 6. The PECORA, the Characters of which Order are, that they have no fore Teeth in the upper Jaw, thoſe in the lower are ſix, or eight; the Feet are covered with divided Hooſs; and the Teats are two, and are ſituated in the Groin.

ORDER I. *The* ANTHROPOMORPHA.

The Characters of this Order, which is denominated from the Animals belonging to it having the Form of the Human Species, are as follows: The Anthropomorphæ have the fore Teeth, both in the upper and under Jaw, four in Number; the Teats are ſituated not on the Belly, but on the Breaſt. Their Order comprehends three Genera of Animals. 1. MAN, or the Human Kind. 2. SIMIA or the Monkey Kind. And 3d, BRADYPUS, called in *Engliſh* the Sloth.

The Natural Hiſtory of MAN.

Tho' *Linnæus* juſtly ranks Man at the Head of the Animal Creation, yet he is the firſt Naturaliſt, that we know of, who has made Mankind a Genus of Quadrupeds, and claſſed them with Monkeys. It is however an Aſſertion of that celebrated Philoſopher, that he could find no Diſtinction in Characters between Man and the Monkey. He diſtinguiſhes Mankind, according to their different Colours, into four Varieties. 1. The *Europeans*, or white Men. 2. The *Americans*, or ruddy coloured Men. 3. The *Aſiatics*, or tawny coloured Men; and 4. thoſe of *Africa*, or Blacks.

Noſce te ipſum, *Know thyſelf*, is a Precept worthy of the Law-giver of *Athens*, the ancient Seat of polite Literature: An important Branch of Knowledge, which may be reduced to the following Heads: 1. In a religious View, *Theologice*, that you was created with an immortal Soul after the Image of GOD. 2. In a moral Senſe, *moraliter*, that you alone was bleſſed with a rational Soul, to be employed to the Praiſe of the Creator. 3. With Reſpect to the other Works of the Creation, *naturaliter*, that you are conſtituted their Lord, for whoſe Uſe they were made. 4. In a phyſiological Senſe, *Phiſiologicè*, the moſt perfect and amazing Fabric of your Body. 5. With Regard to Diet, *diætetice*, what Things are uſeful, and what hurtful, in this Reſpect. 6. In a pathological Senſe, *pathologicè*, how frail you are, and how ſubject to a thouſand Calamities.

Theſe are the Heads, which, according to *Linnæus*, comprehend the Knowledge of Man, conſidered as an individual; a Branch of Knowledge ſo eſſential to the human Race, that, without it, he ſeems to doubt whether any other Characters be ſufficient to entitle one to be ranked among Mankind: For he adds, *Hæc ſi noveris*, HOMO *es, et a reliquis animalibus diſtinctiſſimum genus.*

The following Sketch of the anatomy of the human Body, extract-

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ed from the Works of a late Naturaliſt, may ſerve as an out-line of the reſt of the natural Hiſtory of this Genus.

The Body of Man is divided into the Trunk, Branches, and Extremities. The Trunk is compoſed of three Cavities or Venters; the firſt is the Head; the Middle, the Breaſt; and the Lowermoſt is called the Lower-belly. The Extremities are diſtinguiſhed into the Upper and Lower; the Upper comprehend the Arms and Hands, and the Lower the Thighs, Legs and Feet. The Parts that cover the Body are called the Teguments, which, in general, are the Skin and the Fat. Under the ten Muſcles of the Abdomen, there is the Peritonæum, that contains a great Part of the Viſcera of the Lower Belly; the Epiploon, commonly called the Caul, is like a Bag, and generally contains a great deal of Fat: It is connected to the Stomach, the Duodenum, the Spleen, and it ſeems to lie looſe upon the Guts, and commonly reaches below the Navel.

The Ventricle, or Stomach, is in Shape ſomewhat like a Bagpipe, and lies croſs the upper Part of the lower Belly, but a little more to the left than the right. The two Orifices are the upper, which joins to the Gullet, and the lower, called the Pylorus: Theſe are raiſed higher than the Body of the Stomach. It is compoſed of four Coats, of which the outermoſt is Membranous, the ſecond muſculous, the third nervous, and the fourth is made up of ſhort Fibres, which ſtand perpendicularly upon thoſe of the former, for which Reaſon it is called by ſome the Velvet coat: It is full of Plaits and Wrinkles, but principally about the Pylorus. The Tube that reaches from the Stomach to the Anus, comprehends all the Inteſtines, or Guts, ſome of which are ſmall, as the Duodenum, the Jejunum, and the Ilium; and the reſt large, as the Coecum, or Blind-gut, the Colon, and the Rectum. All theſe together form a Tube which is ſix Times the Length of the Body to which it belongs. They are all connected, except the Duodenum, to a membranous Body, called the Meſentery, which conſiſts of two Membranes or Laminæ, between which there is a Cellular Web, and ſeveral conglobate Glands. The Blind-gut is a Sort of Bag, on the out Side of which there is a Worm-like Appendage. Along the Colon there are three ligementous Bands, which, being a little ſhorter than the two internal Coats, cauſe it to have ſeveral Folds.

The Anus terminates the Rectum, or ſtrait Gut, and has a circular Muſcle deſigned to cloſe it, and is called the Sphincter, and two others that help to evacuate the Excrements, by relaxing the Sphincter. The ſmall Guts are placed in the Middle, and the great Guts take up the Sides, as well as the upper and lower Parts of the lower Belly. Beſides the connivent Valves, there is another more conſiderable, called the Valve of the Colon: This ſuffers the Excrements to paſs from the ſmall Guts into the great, but hinders them from returning back. The Pancreas is ſeated behind the Bottom of the Stomach, towards the firſt Vertebra

Vertebra of the Loins, and is in Shape like a Dog's Tongue: It is about ten Inches long, two or three broad, and one thick, and is of a yellowiſh Colour inclining to Red.

The Liver is a conglomerate Gland of a large Size, of a reddiſh brown Colour, and of a pretty firm Conſiſtence. It takes up not only a great Part of the right Hypochondrium, but alſo ſome of the fore Part of the middle Hypogaſtric Region: It ſometimes advances into the left Hypochondrium, but this happens chiefly to Children newly born. The Liver generally lies cloſe to the fore Part of the baſtard Ribs, for the Space of two or three Fingers Breadth, more or leſs, according as the Diaphragm, to which it is connected, is more depreſſed on the Side of the Belly; or more raiſed on that of the Breaſt; as alſo, according as the Stomach or Guts are more or leſs full. The lower is uſually divided into two Lobes, one on the Right, and the other on the Left: The firſt is called the great Lobe, the ſecond is called the ſmall Lobe, and covers a good Part of the Stomach. The Liver is convex and ſmooth on the upper Surface, but it is concave and unequal on the lower. There are ſeveral Cavities on the concave Side, the firſt of which is the Cleft of the Liver that divides the Lobes, and the ſecond is on the fore Part of the great Lobe, wherein the Gall-bladder is lodged. The Liver is connected to the neighbouring Parts, but chiefly to the Diaphragm, by four Ligaments, which are the Suſpenſory, the Coronary, and the two Lateral: However, none of the Ligaments, properly ſpeaking, ſerve to ſuſpend the Liver but only to keep it in its Place: For the Liver is principally ſuſtained by the Fullneſs of the Stomach and Inteſtines, as theſe are by the Muſcles of the Abdomen. Hence it is obſerved, that when the Liver is abandoned to its own Weight, by the Emptineſs of the above mentioned Organs, it ſo draws theſe Parts, as to produce a painful Senſation.

The Liver ſerves to ſeparate the Bile or Gall from the Maſs of Blood; this is brought to the Liver by the Hepatic Artery, and the Vena Portæ, which conſiſts of the reunion of the Veins that chiefly come from the Viſcera of the lower Belly. The Vena Portæ performs the Function of an Artery and Vein, for it brings the Blood to the Liver; and, after it has depoſited the Bile, it carries back the ſame Blood, and even that of the Hepatic Artery into the Vena Cava. The Bile is ſeperated from the Maſs of Blood throughout all the Subſtance of the Liver, and is carried out of this Viſcus by ſmall excretory Veſſels, called the biliary Pores: Several of theſe Ducts, uniting together, form much larger, which terminate in the Hepatic Duct, which proceeds to be united to another that comes from the Gall-bladder, and forms a common Duct, called the biliary Duct: This carries the Bile into the Duodenum, near to the Place where the pancreatic Duct empties itſelf therein.

The Gall-bladder is a little Membranous Bag in the Shape of a Pear, whoſe Size never exceeds that of a ſmall Pullet's Egg. This Bladder touches the Colon, to which it communicates the Colour of the Fluid

that it contains. On the internal Surface of the Gall-bladder, there are ſeveral Cavities like thoſe of a Honey-comb, that are made by the Folds of the Velvet Coat: There are ſometimes Stones found in the Gall-bladder, formed by a groſs Bile, for they have both the Colour and Taſte, and readily kindle when expoſed to the Fire. Theſe occaſion troubleſome Diſorders, unleſs they are forced into the Duodenum, from whence they have ſometimes been evacuated by Stool.

The Spleen is a Viſcus of a ſoft Conſiſtence, of a bluiſh Colour, inclining to red, and is ſeated obliquely, in the left Hypochondrium, under the Diaphragm, between the baſtard Ribs and the Stomach, immediately above the left Kidney. The Shape of the Spleen is a longiſh Oval, it being about ſeven or eight Inches long, and four or five broad: That Part next the Ribs is convex, and that next the Stomach concave. This laſt Surface is divided into two, by a Furrow that runs throughout its Length: It is by this that the Veſſels proper to the Spleen penetrate its Subſtance.

The Kidneys are two, one on each Side, ſeated in the Region, and along the Vertebræ of the Loins. Each Kidney is about five or ſix Fingers breadth long, three broad, and one thick; the Shape is like that of a Kidney-bean, but the Left is generally placed higher than the Right. The Kidneys have three Kinds of Subſtances, namely, the Glandular, or Cortical; the Vaſcular, which is in the Middle; and the innermoſt, which is Membranous. The Cortical Part is deſigned to filtre the Urine from the Maſs of Blood, brought thither by the Arteries. Theſe Arteries are called Emulgent, and there are generally two belonging to each Kidney. The Atrabiliary Capſulæ, called by ſome the Renal Glands, are covered by the external Coat of the ſame Kidney, and is called the Adipous Membrane, becauſe it is generally loaden with Fat. Their Colour is yellow, which is more or leſs deep in different Subjects.

The Ureter is a membranous Tube or Pipe, that receives the Urine as it is ſeparated in the Valves or Baſon of the Kidneys, through which it paſſes into the Bladder. They are each of the Thickneſs of a Gooſe-quill, and are inſerted into the Bladder, creeping, as it were, through its Coats, in ſuch a Manner, that though there is a free Paſſage for the Urine into the Bladder, it cannot return back the ſame Way.

The Bladder is a Kind of membranous Bag, placed between the ſtrait Gut and the Os Pubis, over which it is raiſed when full. It is placed without the Bag of the Peritonæum, though it is connected to it by its hinder and upper Part; hence it appears, that the fore Part of the Bladder may be opened to extract a Stone, without giving room for any Gut to come out through the Wound. The Bladder has three Coats, the outermoſt of which has fleſhy or muſcular Fibres; the middlemoſt is nervous, and the innermoſt is ſomewhat ſhaggy, almoſt like that of the Guts. The Ureters have the ſame Number of Coats. The Neck of the Bladder has a Duct at the End, called the Urethra, through

through which the Urine is made; its Extremity is ſurrounded with fleſhy Fibres, that form a Muſcle called the Sphincter of the Bladder. This Muſcle cloſes the Neck of the Bladder, and hinders the Urine from paſſing out involuntarily. The Length, Direction, and Capacity of the Urethra are very different in Men and Women; for in the former it is ten or twelve Inches long, and, by its two Bendings, forms a Figure like a Roman S; whereas in Women, it is hardly two Inches long, and the Paſſage is wider in Women than Men. On the upper Part of the Bottom of the Bladder, there is a ligamentous Cord called the Urachus, that terminates at the Navel; it is accompanied by the two umbilical Arteries whoſe particular Uſe regards the Fœtus.

As to the Organs of Generation in Man, the Teſticles are two glandulous Bodies, generally placed without the Body in a Bag called the Scrotum. Their Shape is oval, only they are little flatted on the Sides: they are covered with ſeveral Membranes, which are diſtinguiſhed by Authors into the common and proper. The Scrotum is covered on the Inſide by a fleſhy Membrane called the Dartos, which ſerves to contract it: The Coat that immediately covers the Teſticles is called the Albuginous, and ſeems to be prolonged to encloſe the Epididymes, otherwiſe called the Paraſtatæ. Theſe are oblong Bodies, placed on the upper Edge of each Teſticle, and are in Shape like a Caterpillar. From hence the Deferent Duct proceeds, that aſcends along the ſpermatic Veſſels, after which it reaches the hinder and lower Part of the Bladder, and it glides through the Space between the two ſeminal Veſſels that are placed there, and into which theſe Ducts diſcharge themſelves. The ſeminal Veſſels are membranous and cellular, and about three Fingers breadth long: but they are only an Inch broad. The Shape is like that of a flatted Pear. The two ſlender Ducts of theſe Veſſels are called Ejaculators; they are pretty ſlender, and are inſerted into the Urethra, near the Neck of the Bladder, after they have paſſed through the glandulous Bodies called the Proſtatæ. There is a Ligament that connects the Penis to the Symphyſis of the Os Pubis, and is called the Suſpenſory Ligament, the Skin that covers the Penis is folded at the Extremity, and the Fold is called the Prepuce; this is connected to the lower Part of the Glans by a Ligament called the Bridle. The proper Parts of the Penis are the cevernous Bodies, the Urethra, and the Glans.

The Parts of the Generation proper to Women are, the Labia, the Vulva, the Nymphæ, the Clitoris, the urinary Paſſage, the Vagina, the Matrix with its Veſſels and Ligaments, the Fallopian Tubes, and the Ovaries. The Matrix is the moſt conſiderable of all, and is placed in the Hypogaſtrium, between the Bladder and ſtrait Gut. The Shape is like that of a flatted Pear, and the broadeſt Part is called the Bottom, and the narrower the Neck: This advances a little into the Vagina; it is pierced with an Orifice called the internal Orifice of the Matrix. This is connected to the fallopian Tubes, the Ovaries, and the iliac Regions, by Means of two broad Ligaments; as alſo to the Region of the Pubis by the round Ligaments. The Tubes are open at their Extre-

mities, and are folded and fringed round the Circumference; the Length of the Tubes are about ſeven or eight Fingers Breadth; and they are connected throughout the Breadth to the broad Ligaments; and by the Middle to the Ovaries. The Ovaries are two ſmall, white, oval Bodies, a little flattiſh, ſeated on each Side the Matrix, to which they are connected, not only by the broad Ligament, but alſo by a kind of round Ligament. The Subſtance conſiſts of a ſpongious Web, and ſeveral ſmall Veſſels full of a clear Fluid, to which ſome have given the Name of Eggs.

The ſecond Cavity of the Trunk is called the Thorax, or Breaſt, and is broader at the lower Part, where the Diaphragm is placed than the upper. The contained Parts are chiefly the Heart and the Lungs. The Heart is comprehended by the Pericardium, placed between the two Leaves of the Mediaſtinum; it is a hollow Muſcle, which is accounted the principal Organ of the Circulation of the Blood. It is ſeated, obliquely, in the middle of the forepart of the Breaſt, in ſuch a Manner, that the Baſe is uppermoſt, and anſwers to the middle of the Breaſt: But the Point inclines a little to the left Side. At the Baſe of the Heart, there is a great deal of Fat, and four Veſſels, two of which anſwer to the Cavities within the Heart called the Ventricles; theſe are diſtinguiſhed into the right and left, though they might be more properly called the foremoſt and hindermoſt. The four Veſſels juſt mentioned are two Arteries and two Veins, there being a Vein and Artery to each Ventricle; but the Veins do not open immediately into the Ventricles, for they communicate with thoſe Cavities by Means of two others called the Auricles, one of which anſwers to the right, the other to the left Ventricle. The Vein which anſwers to the right Auricle is called the Vena Cava, and it diſcharges the Blood thereinto from all Parts of the Body. The Artery which receives the Blood from the right Ventricle to diſtribute it into the Lungs is called the Pulmonary Artery; and the Pulmonary Vein is that which brings back this Blood into the Auricle. The Artery that receives the Blood from the left Ventricle, to diſtribute it to all Parts of the Body, is called the Aorta or great Artery.

The Auricles placed at the Baſe of the Heart are two hollow Muſcles, as well as the Ventricles. The Capacities of the Right Auricle and Ventricle are much larger than thoſe on the left; but the Sides of the right Ventricle are not ſo thick as thoſe of the left. At the Orifice of the right Ventricle, there are three Membranes called Tricuſpidal Valves; and two at the Orifice of the left Ventricle, called Mitral Valves, becauſe they are ſomewhat like a Mitre turned upſide down. There are alſo ſome in the Orifices of the Ventricles, that anſwer to the Pulmonary and great Arteries, which, however, differ from the others by their Shape and by their Connections.

We may obſerve in general, that the Blood paſſes from the Heart into all Parts of the Body, by the Arteries, and that a great Part of the Blood returns through the Heart by the Veins; this is called the Circulation

lation of the Blood. The Lungs are two ſpungy Bodies, ſeparated from each other by the Mediaſtinum and the Heart, which are placed between them. Each Lung is divided into Lobes, of which the right has generally three, and the left only two. Theſe Lobes are ſubdivided into a great Number of ſmall ones, and being viewed behind, they nearly reſemble an ox's Foot. The Colour is of a fine red in Infants: But this changes by Degrees to a whitiſh aſh Colour, and in old People it is bluiſh, and ſometimes livid: The Lungs are covered with a Membrane which is a Continuation of the Pleura.

The Aſpera Arteria is a Pipe, which begins at the Bottom of the Mouth, and deſcending along the middle and forepart of the Neck, proceeds to be diſtributed into the Lungs, by a great Number of Ramifications. The uppermoſt Cartilage of the Larynx is called the Epiglottis, on Account of its Situation over the Glottis. The Aſpera Arteria, or Wind-pipe, being arrived at the fourth Vertebra of the Back, is divided into two Branches called the Bronchia.

The Diaphragm is a muſculous Partition, that ſeparates the Breaſt from the lower Belly, and is ſeated obliquely, in ſuch a Manner that the forepart is higher than the hinder, it forms a Kind of Vault, whoſe Convexity is towards the Lungs. It has three conſiderable Apertures, namely, one that is round in the aponeurotic Part, for the Paſſage of the Vena Cava: Another Oval, in the fleſhy Part, for the Gullet; and a third that gives Paſſage to the lower great Artery and the Thorachic Duct.

The Head contains the Brain, the Cerebellum, and the Medulla Oblongata, with the Veſſels that are diſtributed therein. The Brain is covered with two Membranes, called the Dura and Pia Mater. It has two Subſtances; namely, the aſh coloured, or cortical, and the medullary, or white Subſtance. On the Surface of the cortical Subſtance, there are ſeveral Furrows in ſeveral Directions, like thoſe made by the ſmall Guts. In drawing the two Hemiſpheres of the Brain a little aſide, a white Body may be ſeen, which is the medullary Subſtance, known by the Name of the callous Bodies. The Ventricles are two Cavities in the Subſtance of the Brain, and there are the Septem Lucidum, the Vault with three Pillars, the Choroide Plexus, the channelled Body, the Beds of the optic Nerves, the Eminences called the Nates and Teſtes, the pineal Gland, and other ſuch like Parts, which may be diſtinguiſhed at firſt Sight.

The Cerebellum is ſeated under the hinder Lobes of the Brain, from which it is ſeparated by a Partition. This alſo conſiſts of two Subſtances, the Cortical, and the Medullary. The Cerebellum being opened, according to its Length, a white Subſtance may be ſeen, repreſenting a Sort of a Tree on each Side. The Medulla Oblongata is ſeated under the Cerebellum, and along its lower Part there are five Eminences, as well as the Origin of ten Pair of Nerves: The moſt conſiderable of theſe Eminences is called Annular; the ſecond and third are named Pyramidal,

ramidal, and the two laſt the Olivory. The Medulla Oblongata and the Medulla Spinalis give Origin to ſeveral Nerves, which are reckoned by Pairs. There are ten belonging to the Medulla Oblongata, and thirty to the Spinal Marrow, which is only a Continuation of the former.

The Skeleton of a Man is divided into three Parts, the Head, the Trunk, and the Extremities. The Head comprehends the Skull, and the Face. The Skull is a long roundiſh and ſomewhat oval Box, formed by eight Bones, which are the Frontal, the Occipital, the two Parietal, the two Temporal, the Sphenoide, and the Ethmoide. Theſe Bones are harder on the Surface than in the Middle, for which Reaſon they are diſtinguiſhed into two Surfaces or Tables, the external and the internal, beſides the middle ſpungy Subſtance. The Face is formed by the aſſemblage of ſeveral Pieces, contained under the two principal called Jaws, of which one is the upper, and the other the lower. The upper Jaw is immoveable, and is compoſed of thirteen Bones; the chief of which are the Maxillary, which properly conſtitutes the upper Jaw. In this there are ſixteen Teeth, namely four inciſors, two Dog or Eye Teeth, and ten Grinders. The lower Jaw conſiſts of a ſingle Bone, which likewiſe contains ſixteen Teeth, that have the ſame Names as before.

The Trunk may be divided into three Parts, the Spine, the Thorax, or Breaſt, and the Baſon: The Spine is a bony Column, compoſed of twenty-four Vertebræ, which are diſtinguiſhed into the Cervical, the Dorſal, and the Lumbar; beſides the Os Sacrum, at the Extremity of which there is a Bone called the Coccyx. The Thorax, or Breaſt, is formed of twenty-four Ribs, that is, twelve on each Side, of which the upper ſeven are called the true Ribs, and the five lower the falſe, or Baſtard Ribs. Beſides there is the Sternum, which is generally compoſed of two Pieces, not to mention the Dorſal Vertebræ. The Baſon is compoſed of two great Bones, named the Innominata, or the Hip Bones, which join together before, and are connected behind to the Os Sacrum.

The Extremities of the Skeleton are four in Number, two upper and two lower. Each upper Extremity is divided into the Shoulder, the upper Part of the Arm, the lower Part of the Arm, and the Hand. The Shoulder conſiſts of two Pieces, called the Collar-Bone and the Shoulder-bone. The upper Part of the Arm conſiſts only of one Bone, named the Humerus. The lower Part of the Arm conſiſts of two Bones termed the Radius, and the Ulna. The Hand is diſtinguiſhed into three Parts, namely the Carpus, which is compoſed of eight Bones; the Metacarpus, which has four; and the Fingers, which are five in Number, each of which is formed of three Bones named the Phalanges.

The lower Extremities are divided into three, the Thigh, the Leg, and the Foot; the Thigh has only one Bone, termed the Femur, and

Subdivisions of Mathematical Instruments.

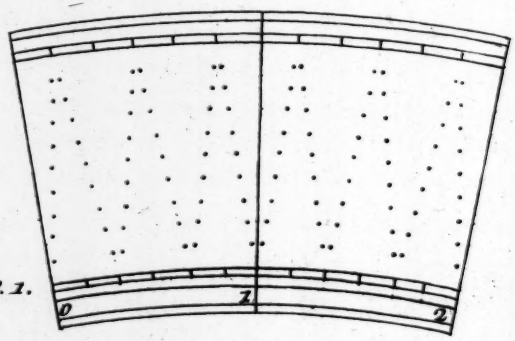

Fig. 1.

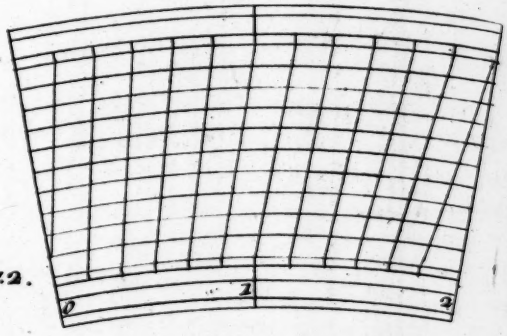

Fig. 2.

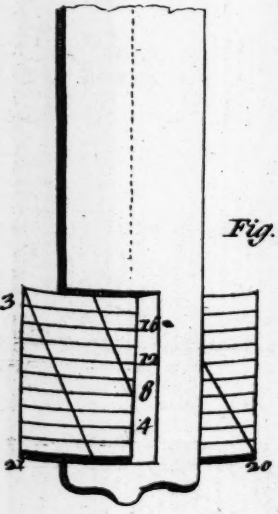

Fig. 3

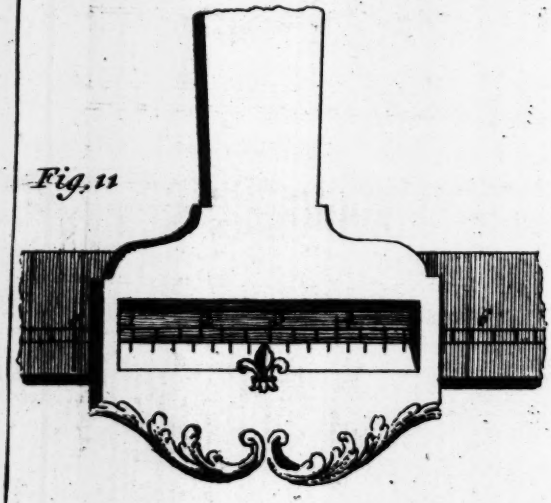

Fig. 11

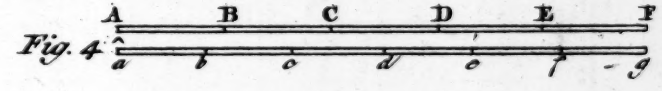

Fig. 4

Fig. 5

Fig. 6

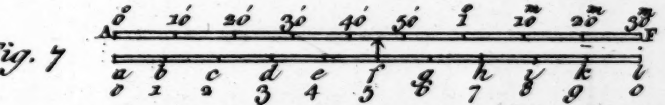

Fig. 7

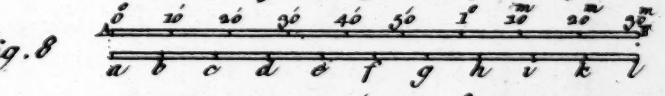

Fig. 8

Fig. 9

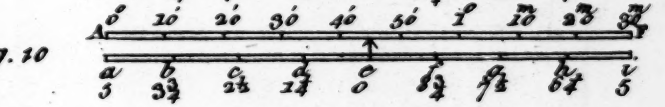

Fig. 10

Engraved for the General Magazine *for W. Owen, at Temple Bar.*

the Leg two the Tibia and the Fibula. The Foot is divided into three Parts in the ſame Manner as the Hand, *viz.* the Tarſus, the Metatarſus, and the Toes: the Tarſus conſiſts of ſeven Bones, the Aſtragalus, the Bone of the Heel, the Navicular Bone, the Cuboide, and the three wedge-like Bones. The Metatarſus has five Pieces, and the great Toe conſiſts of two, but all the reſt have three. Thus we reckon fifty-four Bones belonging to the Head, fifty-four in the Trunk, and one hundred and twenty-four in the Extremities, and conſequently there are two hundred and twenty-two in all.

When an Infant is juſt born, its common Size is twenty-one Inches long, and the Breaſt, meaſured longways on the Sternum, is about three Inches. The Head is large in Proportion to the reſt of the Body, but continually decreaſes with regard to the other Parts, till it is full grown. There are many Nations, ſome of which inhabit cold Climates, that plunge their Children into cold Water as ſoon as they come into the World. It is ſaid, the *Laplanders* lay their Children upon the Snow, till their Breath is almoſt gone, and then they dip them in a hot Bath. Though it is uſual here for Children, as ſoon as they are born, to be ſwaddled up, and kept as warm as poſſible, the *Siameſe*, *the Japaneſe*, the Negroes, and the native *Americans*, keep their Children naked, and only lay them on Cotton Beds, or tie them to Boards covered with Skins.

Of the Subdiviſions of Mathematical Inſtruments.

Inſtruments with graduated Limbs may be ranked under two Claſſes. First thoſe whoſe Limbs are moveable in a vertical Plane at the Time of Obſervation; theſe have a Plumb-line ſuſpended from the Centre of the Arc drawn on the Limb; which Line ſhews among the Diviſions made on the Arc, the Quantity of the obſerved Angle. The ſecond Claſs comprehends all Inſtruments whoſe Limbs are fixed during the Obſervation, and have a rigid Radius moveable upon the Centre, and on which a right Line drawn from ſuch Centre to its other End the divided Arc on the Limb, is called the *fiducial Line*, and that Extremity of it which moves over the Diviſion is named the *Index*; its Uſe being to ſhew on the Limb, the Point whereby the Obſerver is to fix his Judgment as to the Quantity of the Angle he is ſeeking.

Now it does not always ſo happen, or rather, indeed, it very rarely happens, that after the Obſervation for meaſuring an Angle is taken, the Plumb-line or Index is found to fall preciſely on any of the Points of the Diviſion of the Limb; for that it ſhould do ſo, the obſerved Objects muſt be ſo diſpoſed that the Determination of their mutual Diſtance correſponds to a certain round Number of Degrees, or at leaſt of Degrees and ſuch Parts of a Degree as the Limb is actually divided into. The Index or Line therefore uſually falling between ſome two Points of

of the Diviſion, if in a Quadrant of a Circle divided, into every 10′, the Plumb-line ſhall fall, for Example, between 40° 0′ and 40° 10′; and in a Sextant divided into every 20′, the Index ſhall reſt between 40° 0′ and 40° 20′, the obſerved Angle will, in the former Caſe, be greater than 40° 0′, and leſs than 40° 10′; in the latter it will ſurpaſs 40° 0′ but be ſhort of 40° 20′.

Wherefore the Obſerver, if he would have the juſt Value of the obſerved Angle, muſt have Recourſe to ſome Expedient for eſtimating the Exceſs, or valuing the Space gone over on the Limb, whether by the Index or by the Plumb-Line, beyond the Point 40°, or any other like Point. Before the Invention of the *Tranſverſals* or *Diagonals*, and the *Nonius* Scale, it is probable, as nothing was called in to the Aſſiſtance of the bare Eye, the Judgment was liable to frequent Errors: For which Reaſon we look upon all Obſervations of Antiquity as not to be depended upon to leſs than a Minute at the fartheſt, and that Inſtruments of great Dimenſions muſt have been employed, to attain even ſuch Exactneſs, through the Number and ſenſible Diſtances of the Points into which the Degrees on the Limb was ſubdivided. For in ſmaller Inſtruments where a Space of two or three Minutes is hardly perceptible, it may be preſumed that the Errors were ſtill more enormous.

From what has been ſaid, it is now eaſy to diſcern for what Purpoſe the uſual Appendages to the primary Diviſions of graduated Inſtruments were introduced; namely, to be able to make a better Eſtimation than could poſſibly be done by the bare Sight only, of the Space contained between a Point of Graduation on the one Side, and the Plumb-line or Index on the other. How comes it to paſs, that an Object, in itſelf ſeemingly ſo inconſiderable, ſhould yet have intrinſic Merit enough to engage the Attention of ſeveral Perſons of diſtinguiſhed Parts and Genius? The Thing, in effect, is of infinitely more Importance than it may at firſt Sight ſeem to be, eſpecially to the divine Science of Aſtronomy, ſince the Juſtneſs of all its Operations is eſſentially connected with it; and therefore we ſhall endeavour in the firſt Place, from the beſt Proofs and Monuments, to trace the Origin and Progreſs of it.

It is a vulgar Miſtake that the Method of Subdiviſion uſually diſtinguiſhed by the Appellation of *Nonius*, was the Invention of *Petrus Nonius*; for his Method, deſcribed at large in his learned Treatiſe *de Crepuſculis*, printed at *Liſbon* in 1742, and in his Book *de Arte atque Ratione Navigandi* twenty Years after, is widely different. It conſiſts in deſcribing, within the ſame Quadrant, 45 concentric Arches, dividing the outermoſt into 89, the next into 88, and ſo on, till the innermoſt was divided into 46 only. By this Means the Plumb-line, or Index, in moſt Obſervations muſt croſs one or other of theſe Arches very near a Point of Diviſion; whence, by Computation, the Degrees and Minutes of the Arch might eaſily be counted. This Method of Subdiviſion is alſo deſcribed by Mr. *William Barlowe*, in his Book entitled *The Navigator's Supply*, printed at *London* in 1597; and an Exam-

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ple of it is to be ſeen in the firſt Figure of *Tycho Brahe*'s *Aſtronomiæ Inſtauratæ Mechanica*, printed the ſame Year: But this divides the Degrees very unequally, and is alſo very difficult to execute to Exactneſs, eſpecially when the Numbers, into which the Arches are to be divided, are prime, of which there are no leſs than nine; though *Tycho*, in a ſecond Inſtrument, endeavoured to leſſen the latter Difficulty by the Uſe of other Numbers, yet to that Inſtrument he added Diagonals, which he ſo much preferred, that he quite rejected *Nonius*'s Way, and uſed them in all his future Inſtruments.

This Method of Diagonals was firſt publiſhed by *Thomas Digges*, a *Kentiſh* Gentleman, in his *Alæ ſeu Scolæ Mathematicæ*, printed at *London* in 1573, occaſioned by the famous new Star which had lately appeared in *Coſſiopea*, and which he obſerved with a Fore-ſtaff thus divided. He acknowledged the Invention was not his own, having been long practiſed in *England*; and was, as he had been informed, the Diſcovery of one *Richard Chanſeler*, a moſt ſkilful Artiſt. *Tycho*, treating of the ſame Star, takes Notice of the Paſſage in Mr. *Digges*, and affirms, when he ſtudied at *Leipſick*, he uſed ſuch an Inſtrument divided after this Manner, which was communicated to him from one *Homelius*, a Mathematician; this was about 1565.

But *Jacobus Curtius*, Vice-chancellor of the Empire, improved at different Times, the Subdiviſion by concentric Circles. At firſt, after deſcribing within the Limb of the Quadrant, a Number of ſuch Circles, he extended the firſt to 91 Degrees, the ſecond to 92, the third to 93, and ſo on; and then divided each of theſe into 90 equal Parts. This, being at *Rome*, he communicated to *Clavius*, who publiſhed it there in 1586, in his Treatiſe *de Fabrica et Uſu Inſtrumenti ad Deſcriptionem Horologior.* And *Clavius* himſelf propoſes a Variation of this Method by deſcribing 39 ſuch concentric Circles within the Limb of the Quadrant, continuing the ſecond of theſe to 91 Degrees, the third to 92, and ſo on, till the 39th extended to 128 Degrees. Each of theſe Circles he divided into 128 equal Parts, by the ſimple Way of continual Biſſection. But a Calculation is neceſſary, or at leaſt a Table ready computed for knowing the Degrees and Minutes which anſwer to the Diviſions of the ſeveral Circles in both theſe Methods; and *Curtius* made a ſecond Improvement, which required no ſuch Computation. This he ſent, about 1590 both to *Clavius* and *Tycho*, which he firſt publiſhed in his Book of the Aſtrolabe in 1593; and *Tycho* printed *Curtius*'s Letter, with the Account of this Improvement, at the End of the abovementioned Treatiſe, where he gives a Deſcription of his Inſtruments. This Method conſiſts in ſetting off from the firſt concentric Arc within the outermoſt, the 60th Part of ſuch a Proportion of that Arc as anſwers to 61 Degrees, and from ſuch Diviſion continuing on through the whole Arc, the Intervals of ſingle Degrees. By this Means every Diviſion in this Arc is advanced one Minute forwarder than in the firſt. At the Beginning of the next Arc he takes off the

60th Part of 62 Degrees, and from that Point continues through the whole Arch, the Intervals anſwering to ſingle Degrees; whereby each Diviſion in this Arc is advanced two Minutes beyond the Degrees of the firſt. And thus he proceeds till the Degrees are divided into the whole Number of Minutes they contain.

But as this laſt Improvement is very operoſe, a moſt excellent Compendium of it has been ſince introduced. This was firſt communicated to the World by *Peter Vernier*, a Perſon of Diſtinction in the *Franche Comptè*, in a very ſmall, and now very ſcarce Tract, entitled *La Conſtruction, l'Uſage et les Proprietez du Quadrant nouveau de Mathematique, &c.* printed at *Bruſſels* in 1631. In his Dedication to the Infanta of *Spain*, Governeſs of the *Netherlands*, having ſhewn its Preference to what *Nonius* and *Clavius* had done in this Affair, he adds, "*Le mien ayant tous ces Advantages ſur les autres, ce n'eſt pas ſans Subject que je l'appelle Nouveau et de mon Invention.*" In the Preface alſo he claims it as his own Invention, and ſays, thereby a Quadrant of three Inches is capable of determining Minutes. In his Book he ſhews how to apply it to Inſtruments of different Dimenſions. His Contrivance is a moveable Arc divided into equal Parts, one leſs in Number than the Diviſions of the Portion of the Limb correſponding to it.

In 1634, *Joan. Baptiſta Morinus*, one of the Royal Profeſſors of Mathematics at *Paris*, printed a Book entitled *Longitudinum Cœleſtium atque Terreſtrium Scientia.* The Author, in graduating the Inſtruments for making Obſervations to ſufficient Exactneſs, commends two Methods: The firſt, he ſays, was the Invention of *Joannes Ferrerius*, a moſt induſtrious and acçurate Artiſt. This is performed by circular Diagonals, which, continued, ſhall paſs through the Centre of the Quadrant, and which he demonſtrates to anſwer to geometrical Rigour. But to ſave the Trouble of drawing particular Diagonals to every particular Degree, he adviſes one only to be affixed to the moveable Index, which being divided into 60 equal Parts, by its Interſection with the ſtreight Lines proceeding from the Centre, and diſtinguiſhing the Degrees on the Limb of the Inſtrument, will give the overplus Minutes. The other Method is *Vernier*'s, which *Morinus* particularly explains, aud ſhews, if the Radius of a Quadrant be half a Foot, one Foot, two Feet or three Feet, by a ſmall Arc divided into 30 equal Parts anſwering to 31 of the Diviſions of the Limb, along which it moves either as a Sector, or as joined to the Arm that carries the Sights, Angles may be meaſured true to one Minute, 30 Seconds, 15 Seconds, or 6 Seconds reſpectively. This he juſtly prefers to the other Method, and deſcribes it again in the Continuation of his Book, printed in 1636, and again a further Continuation printed in 1639, where he recommends an Azimuth Quadrant of 5 Feet Radius, which by this Artifice would meaſure Angles to two Seconds; and laſtly in his Anſwer to *Longomontanus*, printed in 1641, he mentions both theſe Methods.

Notwithſtanding all this, in 1643, one *Benedictus Hedræus* a *Swede*, publiſhed at *Leyden* a ſmall Treatiſe, entitled *Nova et accurata Aſtrola-*

bij Geometrici Structura, &c. where in the Preface he takes Occaſion to deſcribe circular Diagonals, without mentioning *Ferrerius*, and aſſumes to himſelf *Vernier*'s Method. This, in his Book, he applies to a Theodolite and Protractor, by dividing ſuch a Part of a moveable Circle as anſwers to 61 Degrees of the Limb of the Inſtrument, into 60 equal Parts: He ſhews alſo how this moveable Circle may be otherwiſe divided, and likewiſe deſcribes a large Aſtronomical Quadrant, which by a ſmall moveable Arc correſponding to 5 Degrees 5 Minutes of the Limb of the Inſtrument, each Degree of which Limb being divided into 12 equal Parts, would Meaſure Angles to 5 Seconds, or even half that.

This Method is alſo ſuccinctly explained by *Tacquet* in his *Opera Mathematica* printed in 1669; where he would aſcribe the Original of it to a Propoſition of *Guido Ubaldi*, in his Book of Aſtronomical Problems publiſhed after the Author's Death in 1609. But this was delivered very diſtinctly by *Clavius* in his *Fabrica et Uſus Inſtrumentorum, &c.* printed in 1586, as the Invention of *Fabricio Mordente*, the Emperor *Rudolphus*'s Mathematician, who diſcovered it long before, as appears by a Treatiſe of his Brother, printed at *Antwerp*, 1584, entitled *Il Compaſſo del Signor Fabritio Mordente: Con altri Iſtromenti mathematici ritrovati da Gaſparo ſuo Fratello.* However this can at moſt be conſidered as a very faint Rudiment of theſe Methods, being no more than a Propoſal to find the Number of Minutes, Seconds, *&c.* of any Arc leſs than a Degree, by multiplying this Arc 60 Times, whereby the Number of Degrees it meaſures, will expreſs the Number of Minutes in the original Arc; and if the Multiple exceed an exact Number of Degrees, the Exceſs multiplied in like Manner will exhibit the Seconds, whereby the Arc given exceeds an exact Number of Minutes.

In 1673 *Hevelius* publiſhed the former Part of his *Machina Cœleſtis*, where he adopts this Method with due Applauſe; being the firſt that reduced it to Practice in large Aſtronomical Inſtruments. He deſcribes it from *Hedræus*, and appears not to have known that it had been mentioned by other Writers. In 1674 one *Gerard à Gutſchoven*, Profeſſor of Mathematics and Anatomy in the Univerſity of *Louvain*, in a very ſmall Piece entitled *Uſus Quadrantis Geometrici* printed at *Bruſſels*, gives this Method without taking Notice of any preceding Author. He applies it in the Form of a Sector to a ſmall Quadrant, whereby Minutes may be meaſured. This Quadrant, which he ſo much boaſts of, is not the Production of his own Cloſet, but as brought into Uſe in the Fields and Woods, has the rectilinear Sides of the Quadrant projected into two circular Arches to make Room for the ſinical Diviſion in the Middle, which had been deſcribed by others.

To ſum up all, the Truth is, that neither of theſe two Methods we have taken the Pains to ſettle the Hiſtory of, is of any Advantage, unleſs executed with Exactneſs; and that one great Excellence of *Vernier*'s

is that of readily diſcovering the leaſt Error committed in the primary Diviſions; none but able Artiſts ſhould dare to undertake it. It was firſt of all, that we know of, performed moſt accurately by the Hand of the moſt excellent *Graham*, the *Archimedes* of our Age and Nation, in the firſt 8 Foot mural Quadrant made for the late Dr. *Halley* at the Royal Obſervatory at *Greenwich*; and being thereby ſufficiently eſtabliſhed, has been ſince performed in the like and various other Inſtruments, by our moſt ſkilful Inſtrument Makers, ſeveral of which have been commiſſioned from moſt Parts of *Europe* where Aſtronomy has found a proper Patronage.

The ſtrict Theory of Subdiviſions, and its Application to Practice ſhall be the Subject of a future Eſſay.

Of Spontaneous Combuſtions. By Mr. Du Hamel.

IT is well known that in Countries which abound in Coal Mines, ſome of them have continued burning Time immemorial. Many are of Opinion that they were ſet on fire by ſome external Cauſe, whilſt others maintain, with greater probability, that ſuch Ignitions are ſpontaneous. I ſhall not take upon me to decide in this Matter, but only relate certain well averred Facts, which may prove at leaſt the poſſibility of theſe Combuſtions.

Volcanos afford grand Inſtances of Combuſtions which can be of no other than this Kind, and it may be remembered that M. *Lemery* endeavoured to account for them from a Mixture of Iron and Sulphur: Inflammations of Oils by Acids furniſh other Examples of this Sort of Ignitions. But in 1741 there was at *Breſt* a ſignal Example thereof, worthy to be recorded; and I can myſelf vouch the Truth of the Fact in every particular, as I was careful to ſet down upon the Spot the Circumſtances which accompanied that ugly Event.

As there is a large Conſumption of Pit-coal in all great Sea-ports, there was an Incloſure at *Breſt* where a very conſiderable Quantity was ſtored to a great Thickneſs, expoſed at the Top to the open Air.

In this Incloſure, formed of Planks coarſly joined together, ever ſince *Breſt* commenced a Port, there was always kept up a Stock of Coals to the Amount of many hundred of *Barriques*, and that without any Combuſtion. This is inconteſtible.

It was ſuſpected, ſeveral Years before the Accident now before us, that Pit-coal, thus expoſed to the Injuries of the Air, was deprived of its Quality; and 'tis very likely it might be ſo; and that if the Coal had been immerſed in Water, it would have perhaps kept in better Condition. I ſhall not neither be definitive on this Point; it was however propoſed to depoſite it in a covered Store-houſe.

What kind of Form ſuch a Magazine ſhould have, was a Matter of Conſideration; ſome were of Opinion that there ſhould be left a free Paſſage for Air bove, becauſe it had been frequently obſerved that Coal

Coals deep ſtowed in Ships Holds, during long Voiages, when the Weather would not permit of keeping the Scuttles open, had taken Fire: And for what more prevalent Reaſon the new Magazine was built quite cloſe at Top, I know not. It was divided equally in two by a party Wall, and marked N°. I. and N°. II.

N°. I. was filled entirely, and held 12 hundred Barriques of Coals: Not long after which the Coals kindled, which was diſcovered by the Smoke iſſuing through the Chinks of the Door. As ſoon as the Door was opened, a very thick Smoke burſt out, and it was found neceſſary to throw in a great deal of Water before the Labourers who were appointed to take out the Coals, could begin to Work.

They found a Standard-poſt of Deal oppoſite to the Door, half burnt, and alſo a croſs Beam which touched the Top of the Coals. The Wood was not of a Flame, though reduced almoſt to Coal. The outer Surface of the Pit-coal was but barely heated by the Smoke that had penetrated it; but the Middle of the Heap had already loſt its inflammable Quality, and was become a Sort of Cinders; but the Bottom remained very good, and without any ſenſible Heat.

About one half of the Coals of N°. I. were taken out, and the burnt Part was ſeparate from the reſt, ſome of which was put into N°. II. and the other Part into the old Incloſure.

It was propoſed to open a Paſſage for Air into N°. I. and N°. II. and alledged that though the Magazines were not filled quite full, yet for want of Ventilation the Coals, though they ſhould not kindle as before, might ſtill be damaged by heating; however it was finally determined that the Magazines being already burnt, all Accidents might be ſecured againſt if N°. II. were not filled up to the Top. Soon after this a large Quantity of Coals was landed at *Breſt*; and although none of them were placed in N°. I, as it had already taken fire, yet was N°. II. filled quite full, and in a ſhort Time thoſe Coals kindled, juſt as before in N°. I; only the Damage was not ſo great, becauſe the Thing was diſcovered ſooner. In this alſo the Top Part was only heated, the Center in Part conſumed, and the Bottom remained cool.

Here then is an undeniable Example of ſpontaneous Combuſtion. I ſhall produce another, which though under a leſſer Maſs, is yet more extraordinary, the Particulars whereof were ſent me from *Rochefort* in Writing, authenticated by the Clerk and Enginier of the Marine.

July 18, 1757, ſome Cloths of the Sort they call *Toiles á Prelat* were primed with red Ochre and Linſeed Oil to make three Packing-Caſes. Theſe Cloths are of large coarſe Hemp Thread; they were firſt moiſtened, and after that they were primed or painted on one ſide only with red Ochre ground up in Linſeed Oil. The Seaſon was ſo hot, that the Cloths being expoſed to the Sun, were quickly dried. On the 20th, about three or four o'Clock in the Afternoon they were taken down and haſtily rolled up, becauſe a Storm was apprehended to be coming on. The Cloths extremely heated by the Sun, and ſixty or eighty Feet

long

long were folded ſo that their painted Sides were contiguous, and bound cloſe together that they might take up the leſs Room in the Store-houſe, where they were laid on a grating of wooden Bars from two to four Inches ſquare and two or three Inches a ſunder, about a Foot above the Flooring.

This Store-houſe is even with the Ground, the Flooring of Wood, with ſeveral Scaffolds on which they lay the Sails of Ships: it is carefully locked up every Night.

As theſe *Prelats* were intended for three Packing-cloths, they were folded in three ſeparate Parcels, and then laid one upon the other.

The twenty-ſecond, at four in the Morning a Man happening to lay himſelf down on theſe Cloths, finding that next him to be intolerably hot, ran his Hand in among them, but was forced inſtantly to draw it back. The Maſter of the Store-houſe being acquainted of this, ordered the Pieces to be removed out of Doors; upon opening of which a thick Smoke aroſe, and ſome averred that they perceived Flame alſo; but this is doubtful, for the Sun being then riſen and ſhining upon the Smoke might cauſe ſuch an Appearance.

This Accident occaſioned no ſmall Uneaſineſs; as it was ſuſpected that the Cloths had been deſignedly ſet on fire: *M. de Rhuis*, the Intendant, ordered the grating to be taken up, and every Part about it to be thoroughly ſearched; but not the leaſt Mark of Fire could be found. All ſuſpicion however was diſſipated, when upon unfolding the Cloths it was found that the Fire had kindled in the Center of each, that the outſide was not damaged, and the Parts reduced to Coal were the Folds, and thoſe principally where the Cords bound, which might be crumbled betwen the Fingers.

Other Maſters of Store-houſes have ſince declared that they have known the like to have happened Years ago; but as they could not perſuade themſelves that Fire could kindle of itſelf among the Cloths, they concealed it, for fear of the Imputation of Negligence, and a conſequent Penalty.

It is well known that Sheafs of Corn after a wet Harveſt, are apt to heat in the Mow, eſpecially if any moiſt Weeds have been heedleſsly collected with the Straw. In theſe Circumſtances I never ſaw the Straw burnt to Coal, though the Grain was roaſted ruſſet and rendered wholly unfit for Seed.

Hay reeked moiſt is apt to heat greatly; of which *M. Bouguer* ſaw ſome in *Peru* which was actually reduced to a Cake of Coal. It is probable that the pingueous Subſtance, that enters into the Compoſition of all Vegetables, is the Foundation of the warmth of Dunghills and Hot-beds, and that the like pingueous Subſtance of Hides which penetrates the Tann, is the Cauſe why Beds of it retain ſo durable a Heat.

But the Quantity of inflammable Matter which exiſts in Pit-coal, and in Oil Paint is far more likely to generate Heat. It is true that in the ſeveral Caſes above recited, neither Flame nor red hot Coals were

ſeen;

ſeen; ſo there was no real Inflammation; but when Heat is excited to ſuch a Pitch, what wants there to produce Fire but a Parcel of combuſtible Matter, ſuch as dry Hemp, with a little freſh Air? Upon the whole, beſides the importance of a thorough Knowledge of the Cauſes of ſuch ſpontaneous Ignitions to the Naturaliſts, it is well to be rightly informed of them, in order to prevent the Miſchiefs that may reſult from them: For it is now ſuſpected that the terrible Conflagration which happened the laſt Year (1761) at *Rochefort*, and began in the Sail-cloth Store-houſe, might have been occaſioned by ſome freſh painted *Prelats* depoſited there a little before that Fire broke out.

Additon by the Editor.

The following Account is given by one Mr. *R. Roe* — "Amongſt the numberleſs Curioſities in the Mountains of *Derbyſhire*, I take the Liberty to preſent you with a ſmall Quantity of one of them for your Trial; which is a brown Earth (lately diſcovered) that I powdered and mixed, about a Pound and a Half, with Linſeed Oil, in order to grind for Paint. I left it in a Heap, and returning in about three Quarters of an Hour, found it rolling about in a gentle Flame; the Smoak and Smell made it impoſſible to endure being near it —— A ſecond Time I mixed about the ſame Quantity, to try if it would operate as before: It lay three Quarters of an Hour, and then felt quite cold; but a ſmoak aſcending from a Lump of the Bigneſs of a Pea, I broke it, and in half a Minute the whole was on fire. It did not flame till ſtirred in, and then burnt with ſuch Violence, that it roared like Thunder, and ſo continued till the Oil was conſumed

This Foſſil is got in a Lead-mine in the Peak of *Deribyſhre*, about ten Fathoms below the Earth's Surface, where there are ſeveral *Strata* of the ſame Nature, but different in Colour, as red, blue, yellow, white, *&c.* occaſioned, as I imagine, by the aqueous Particles paſſing through various Minerals which abound there."

The next is far more extraordinary, contained in a Letter written about thirty Years ago by the learned Marquis *Scipio Maffei* of *Verona*, and was confirmed by Letters from Sir *Thomas Dereham* to the *Royal Society*, of which he was a Member; the Narrative is as follows:

"*Cornelia Bandi*, a very pious Lady of the City of *Ceſenna*, about 62 Years of Age, retired to her Chamber at her accuſtomed Hour, without any Attendant. This was *March* 14, 1731. There was nothing obſerved uncommon about her, ſave that ſhe looked a little dejected and fatigued. There was no Fire in her Apartment, and the Weather was calm and ſerene all the Night: However her Body was found the next Morning reduced to a ſhapeleſs Maſs of Aſhes, all but Part of her Head, and three Fingers of one Hand, and her Legs and Feet, which remained intire. The ſaid Aſhes were imbibed with a viſcous Liquor of a very diſagreeable Scent; the Walls, Bed and Furniture were covered with a fine moiſt Duſt, which penetrated even into the Cloſet of the next Room; the Ceiling over her was ſtained with a yellow Moiſture of a fetid Smell: the Parts of her Body which were not conſumed, all looked black as if broiled over an ordinary Fire, but were not mangled at the Extremities; nothing in the Chamber received any Damage, or in any other Part of the Houſe, except two Candles placed near her Bed, the Tallow of which was diſſipated, but the Wicks not burnt; in ſhort it was the Opinion of all, that neither common Fire nor Thunder

Thunder could have any Share in this very ſingular Accident; and that it was a fire of a more active and ethereal Kind that had kindled up in the *Viſcera* of the Deceaſed, and produced all the recited Circumſtances.

Of Roots.

IN almoſt every Species of Plants, the Roots, Stems, Leaves, Flowers, and Fruits, may be ſeparately conſidered; and as the Culture which is beſtowed on the Earth's Produce, the Tillage, the Watering, the Manures have a more immediate Effect on the Roots than on any other Parts of Plants, it naturally prompts us to take Roots for the Subject of this ſecond Chapter.

Roots are of various Forms. Many Plants have in the Ground a fleſhy Subſtance like an Onion; theſe Subſtances which are properly called Bulbs, are formed of ſeveral Coats that encircle one another: Of this Kind are Leeks and Onions uſed in Kitchens. Others, as moſt Kinds of Lilies have their Bulbs formed of Scales. It is proper to remark, that the Subſtance which compoſes the Body of the Bulb, is not a true Root. The Root is a Sort of a fleſhy Scale which ſupports the Bulb, and it is this Part produces the ſmaller Roots which extend themſelves in the Earth, in ſearch of Sap to nouriſh the Plants. The Bulb is, properly ſpeaking a Bud, in which is to be found the Leaves and Flowers that appear in the Spring.

The Tubercles and Productions reſemble in Form the true Bulb, but differ in having a uniform Subſtance, like the Fleſh of Apples, being compoſed neither of Scales nor like the Bulbs. The Buds whence ſpring the like Flowers and Leaves are on the outward Surface. We may mention for Inſtance the Saffron Plant and Garlick.

We ſhall forbear noticing the Varieties obſerved in the Sow-bread, Truffle and Orchis, becauſe they are not cultivated; at leaſt not for the middling Rank of People. The Potatoe, and Jeruſalem Artichoke, have in the Ground a large fleſhy Subſtance, from whence proceed Roots and Stalks. Parſnips, Carrots, Radiſhes, and Turnips, are fleſhy Roots, that make their Way into the Earth and draw their Nouriſhment partly from ſmall fine Roots that extend themſelves on all Sides but principally from the lower Extremity of a vertical or Tap-Root. In Proof of this, the Turnip, which is compoſed of a conſiderable Subſtance on the Surface of the Earth, draws all its Nouriſhment by a ſingle Fibre, that penetrates into the Ground. Other Plants of this Kind, as Aſparagus, produce their Roots in a Bunch, that is to ſay, from one common Center ſpring a Number of Roots, which, without ſeparating, extend themſelves in the Earth, like the Radii of a Circle.

The Root is the firſt Thing produced by the Seed; and this firſt Root ſinks perpendicularly into the Earth, forming what is called the Tap. This Tap is longer or ſhorter according to the Nature of the Soil and the Species of the Plants that have Turnip-like Roots. In

other

other Plants, ſuch as the Wheat Kinds, this firſt Root produces a Number of lateral or ſpreading Roots: If thoſe are very ſmall they are called hairy, or capillary; if they are ſomething larger, they are named fibrous. Moſt Trees and Shrubs and even Plants that are perennial in their Roots only, as Luſerne and Saintfoin, have larger Roots which ſpread themſelves in the Earth after the ſame Manner the Branches ſpread from the Extremity of the Trunk in the Air: Theſe are therefore called ſpreading or branching Roots. We ſhall not any further enlarge on the Form of Roots; but ſhall proceed to ſay a few Words on the Nature of their unfolding.

The firſt Production then of Seeds is a Root which ſinks perpendicularly into the Ground; and if it meets with no hard Bed or Stratum, to oppoſe its lengthening itſelf, it penetrates to a great Depth; this is what is called the Tap-root. It is on this Account that Parſnips, Carrots, Radiſhes, and other Plants, the Roots of which are the Parts made uſe of, ſhould be ſown in deep Land or in ſandy Soils, light and eaſy to be penetrated by their Roots.

The lengthening of the Tap-root may be prevented in all Soils; for it ſhould be eſteemed a general Principle that when a Root is once cut, it lengthens itſelf no more; for the Tap-root then produces lateral or horizontal Roots, and the Senew-roots being cut in the ſame Manner, ceaſe to lengthen only by their Extremities; ſo that whether they are ligneous, or herbaceous, they grow no more in Length when the Extremity is once cut off, though it is only half an Inch.

Whether the Tap-root has been cut, or meets with a very hard Stratum or Bed of Earth that prevents its lengthening itſelf, or whether it continues to extend itſelf without any Hindrance; in every Caſe it produces lateral or horizontal Roots. But the cutting of the Tap-root greatly forwards the puſhing of the laterals; 1. Lateral Roots are more or leſs ſtrong and vigorous as they are nearer to the Surface of the Earth, ſo that if in planting a Tree on level Ground the Roots are placed at ſeveral Degrees of Depth of Earth will be generally more vigorous than ſuch as are deeper; not only becauſe they are nearer at Hand to reap the Advantage derived from Rain-dews, the Heat of the Sun and the Benefit of the Air; but alſo becauſe Roots extend themſelves much more in tilled or manured Earth than in that which is hard and leſs fruitful.

2. Lateral Roots extend themſelves in the ſame Manner as does the Tap roots, like it they produce Branches which ſpread to the Right and Left with this Difference, that the Branches produced by the Tap-root are more or leſs vigorous as they are nearer the Stem. On the contrary, in Lateral-roots which extend themſelves in the ſame layer of Earth many of thoſe Branches that were near the Trunk periſh in proportion to the vigorous Shoots that are made at the Ends.

3. As latter Roots are particularly adapted to the collecting of

Sap, they are by this Extenſion carried every Year into freſh Earth in a State proper to furniſh them with this nutritive Juice, which they tranſmit to all Parts of the Plants. This reſpects ſuch only as are perennial.

4. The Diviſions and Subdiviſions which are almoſt infinite would probably preſerve a very regular Order, the ſame perhaps in all Plants of the ſame Genus, was not this regularity often deſtroyed by many Accidents, ſuch as Stones and very hard Clods which oppoſe their Extention, or Inſects or an Inſtrument of Huſbandry which cuts or breaks them. Thus a Root ſhortened or cut, often produces others, and the Mouths are increaſed. This proves that it is rather of uſe than prejudicial to Plants, to cut ſome of their young Roots in tilling the Ground, provided it is not carried to exceſs in ploughing, the Ground is turned over; and ſome roots, inſtead of being broke, may only be removed from one Place to another. In this Caſe, they are ſurrounded with freſh Earth, another Advantage derived from Tillage.

5. By many Experiments we are well ſatisfied that Roots extend themſelves much farther in looſe than in hard Mould and in rich Earth, than in that which is more barren: This proves the Advantages derived from Tillage and Manures. We are alſo ſatisfied, that in Water there will ſhoot a great Number of fibrous Roots which will extend very far without growing larger, and almoſt without branching. In the Mud of Bogs, Roots extend almoſt in the ſame Manner, but they grow larger than in Water. In light and dry Lands a Number of Roots are ſent forth which do not grow in Bulk. It is nearly the ſame Mould formed almoſt entirely or rotten Dunghills. On the contrary, in good fat Earths that are a little moiſt and have ſome Strength, few Roots are formed; but they are large, and well nouriſhed; this is particularly well adapted to Trees and Plants that are long lived. With Reſpect to annual Plants, the Remarks we have made are leſs important: A Number of Roots collect a great deal of Sap, and form vigorous Plants; and it is a Matter of Indifference in the ſhort-lived Plants whether their Roots are ſo formed as to be of long Duration. It is therefore of much more Importance to annual than to perennial Plants, that the Earth ſhould be ſtirred.

6. It is aſtoniſhing to ſee the Roots of Saintfoin, Luſerne and ſeveral Sorts of Trees, penetrate into very hard Layers of Earth. They have even in a Length of Time over-thrown Walls tolerably ſubſtantial. But when the Roots meet with very hard Strata, the growth of perennial Trees and Plants is ſlower and Annuals die.

7. The Ramifications of Roots extend to a certain Point and the extreme Diviſions become ſo fine that it requires great Attention to be able to diſcover the Extremity of theſe Roots among the ſmall earthy Particles betwixt which they inſinuate themſelves. Doubtleſs theſe capillary Roots are ſo many Mouths deſigned to ſupply the Plants with

Nouriſh-

Nouriſhment, whilſt the great Roots are chiefly intended to ſerve as Pipes, or Tubes to convey it to the Trunk. We have brought Proofs in Support of this in the phyſical Treatiſe of Trees.

8. In taking up Trees or Plants, after a hard Winter we have ſometimes remarked that all the ſmall Capillary, or hairy Roots were dead; on the contrary, when the Seaſon is mild new ones are formed. This Obſervation induced me to imagine, that in hard Winters Trees ſhed their Capillary Roots nearly in the ſame Manner they do their Leaves. This renewal of young Roots may be uſeful to Trees; but the Loſs of ſmall Roots is much apt to impoveriſh Annuals. We have ſometimes pulled up Plants of Wheat after long and hard Froſts in which nothing remained alive but a Kind of ſmall Bulb, with a few very ſhort green Leaves iſſuing from it, and this ſmall Embryo of a Plant was to produce new Leaves and Roots. We therefore eſteem it beſt, that the Froſts ſhould not come on till the Winter Corn has gathered a little Strength; for then that which we called a ſmall Bulb, Bulb being grown larger, will be able to make ſtronger Shoots.

1. As Plants are not capable of a progreſſive Motion, they have received an equivalent from the great Author of Nature, ſince Annuals, by ſcattering here and there their Seeds, are moved to Spots where the Earth is not drained of the Juices they require. Some Plants, ſuch as the wild Cucumber, and the Balſamine, caſt their Seeds to ſome Diſtance, by Means of an elaſtic Motion in their Fruit. Other Plants, the Seeds of which are furniſhed with Wings, or Turfs, are wafted to a great Diſtance by the Wind. Bulbous Roots and creeping Plants renew themſelves by Subſtances placed ſometimes above, ſometimes below, and often at the Head of the Plants that produce them; and theſe Subſtances by this Means are ſurrounded with a Soil new to them. Finally, Trees and perennial Plants, by the lengthening of their ſmall Roots, reach the Earth they have not yet exhauſted.

2. We ſhould deviate then from the Order of Nature, in ſowing Wheat every Year in the ſame Land. On the contrary, we comply with it in ſowing Wheat in the Land reſted for a Year, which time is wholly taken up in tilling it. This will in a proper Place be explained.

3. Some Trees and Plants extend their Roots much farther than others; which ſhews that ſome Plants take up a greater Space of Ground and ſhould be ſowed or planted thinner than others.

4. We have already remarked, that the Extremities of Roots extend very far. A Carrot, or Turnep, for Example, which ſeems to have only one large Tap-root, furniſhed with ſome Filaments, ſends forth nevertheleſs, its Capillary, or hairy Roots to a conſiderable Diſtance.

THE illuſtrious Houſe of *Brunſwick* is divided into two Branches, *Brunſwick-Wolfenbuttle*, and *Brunſwick-Lunenberg*. The Founder of both theſe Lines was *Erneſt* the Confeſſor, who firſt introduced the Reformation into his Dominions, and was ſucceeded, in 1546, by

ELDEST SON, *Wolfenbuttle Line.*	YOUNGEST SON, *Lunenberg Line.*
Francis Otho, ſucceeded, 1559, by his Brother	William; ſucceeded by his Son
Henry; ſucceeded, 1598, by his Son	Erneſt; ſucceeded, 1611, by his Brother
Julius Erneſt; ſucceeded, 1636, by his Brother	Chriſtian; ſucceeded, 1633, by his Brother
Auguſtus; ſucceeded, 1666, by his Son	Auguſtus; ſucceeded, 1663, by his Brother
Rudolph Auguſtus; ſucceeded, 1704, by his Brother	Frederick; ſucceeded, 1648, by his Nephew
Anthony Ulric; ſucceeded, 1714, by his Son	Chriſtian Lewis; ſucceeded, 1665, by his Brother
Auguſtus William; ſucceeded, 1731, by his Brother	George William, Elector of Hanover; ſucceeded, 1705, by his Nephew and Son-in-Law
Lewis Rudolph; ſucceeded, 1735, by his firſt Couſin	GEORGE I. of Great Britain; ſucceeded, 1727, by his Son
Ferdinand Albert; ſucceeded, 1738, by his Son	GEORGE II. ſucceeded, 1760, by his Grandſon
CHARLES, the preſent Duke, Father of the Hereditary Prince.	GEORGE III. brother to Auguſta, Princeſs of Brunſwick.

His Moſt Serene Highneſs Charles William Ferdinand, Hereditary Prince of Brunſwick-Wolfenbuttle Bevern, to whom the Princeſs Auguſta of this Kingdom is now eſpouſed, is the eldeſt Son of the preſent reigning Duke of that Dominion, by the Princeſs Phillippina Charlotta, ſecond Siſter to the King of Pruſſia, and is in the 29th Year of his Age, being born the 9th of October, 1735. He has two Brothers and five Siſters now living, viz. Prince Frederick Auguſtus, aged 23, a Lieutenant General, and Prince William Adolphus, aged 18, a Colonel, both in his Pruſſian Majeſty's Service; and the Princeſſes Sophia Carolina Maria, aged 26; Anne Amelia, aged 24; Elizabeth Chriſtina Ulrica, aged 17; Frederica Wilhelmina, aged 15; and Auguſta Dorothea, aged 14. A third Brother, Prince Albert Henry, who would now have been coming of Age, was ſlain on the 20th of July, 1761, in a Skirmiſh with a Body of French. There were three more Children, who died in their Infancy.

The reigning Duke has three Brothers and ſix Siſters, Uncles and Aunts to the Hereditary Prince.

1. An-

Engraved for the Gen.[1] Magazine, *for W. Owen, at Temple Bar.*

Her Royal Highneſs AUGUSTA,
Hereditary Princeſs of
Brunſwick & Lunenburg.

Engraved for the Gen.l Magazine, for W. Owen at Temple Bar.

His most Serene Highness
CHARLES, Hereditary Prince
of Brunswick & Lunenburg.

1. Anthony Ulric, born 1714, who married a Daughter of the late Duke of Mecklenburg-Schwerin, and has three Sons and two Daughters.

2. Lewis Erneſt, born 1718, Field Marſhal in the Dutch Service, and Governor of Bois le Duc. He is the Guardian of the young Prince of Orange, and was formerly Duke of Courland.

3. Prince Ferdinand of Brunſwick, born 1721, late Commander in Chief of the allied Army in Germany. His moſt Serene Highneſs is likewiſe Governor of Magdebourg, and a Knight of the Garter.

4. Elizabeth Chriſtina, born 1715, the preſent Queen Conſort of Pruſſia.

5. Louiſa Amelia, born 1722, Princeſs Dowager Royal of Pruſſia.

6. Sophia Antonietta, born 1724, eſpouſed to the reigning Prince of Saxe Saalfeld, Brother-in-Law to the Margrave of Anſpach, who was lately on a Viſit to this Court.

7. Chriſtiana Charlotta Louiſa, born 1726.

8. Thereſa Natalia, born 1728, a Canoneſs of the Proteſtant Abbey of Hervorden.

9. Juliana Maria, born 1729, the preſent Queen Conſort of Denmark.

When the Hanoverins reſumed their Arms after the Convention of Cloſter-Seven, and Prince Ferdinand (uncle to the Hereditary Prince) was appointed Commander, this young Hero reſolved to enter the Camp, notwithſtanding his Father had laid a ſtrict Injunction on him to make a Tour to Holland. The Duke of Brunſwick, anxious for the Safety of his Son, wrote a long Letter to his Brother, Prince Ferdinand, deſiring the Hereditary Prince might not be permitted to remain with the Army. But the Prince being very fond of War, and his Uncle not willing to part with him, his Father's Entreaties were not regarded. His many great and heroic Actions, worthy the moſt accompliſhed and experienced General, need not be here repeated. See Page 50.

As ſoon as the War was over, it was determined that the Princeſs Auguſta, elded Siſter of the King of England, ſhould be eſpouſed to him: But Affairs in England were not in the moſt agreeable Situation; nor are the Words of Miniſters always to be taken without the utmoſt Caution. The Marriage was therefore deferred till the meeting of Parliament, when the Dowry was fixed and granted. His Serene Highneſs then came over, and the Marriage Ceremony was performed in private, all the royal Family being preſent except the Princeſs Amelia, who was ill at Bath.

The following is a ſummary Account of the TRIAL *of Mr.* WILLIAM OWEN, *Bookſeller at* Temple-Bar, *for publiſhing the* CASE OF ALEXANDER MURRAY, Eſq; IN AN APPEAL TO THE PEOPLE OF GREAT BRITAIN; *(which was voted, by the Houſe of Commons, Nov.* 20, 1751, *to be "an impudent, malicious, ſcandalous and ſeditious Libel;" upon which they addreſſed the King to proſecute the Author, Printer, and Publiſher for the ſame) which we apprehend may be entertaining to our Readers and the Public in general, as no Part of it was ever before printed.*

THIS GREAT CAUSE was tried, on an Information, at *Guildhall*, on *Monday* the 6th of *July*, 1752, before Lord Chief Juſtice *Lee*. The Council for the King, who ſpoke, were, Sir *Dudley Rider*, Attorney General, afterwards the famous Lord Chief Juſtice of that Name, and Mr. *Murray*, Solicitor-General, now Lord MANSFIELD, and Lord Chief Juſtice of the Court of *King's-Bench*. The Council for the Defendant, who ſpoke, were, Mr. *Ford*, ſince dead, and Mr. PRATT, now Lord Chief Juſtice of the Court of *Common Pleas*.

What the Attorney-general chiefly inſiſted upon, was, that there could be no *Appeal* (alluding to the Title of the Pamphlet) from the Houſe of Commons, as the Libel was upon them. What! ſaid he, *appeal* to a *Mob!* — Muſt Juſtice be appealed from, to Injuſtice? — *Appeal* to the good People of *England?* — The Houſe of Commons are the good People of *England:* The reſt are nothing but a *Mob!* Then, turning to the Jury, he ſaid, Gentlemen, this Libel, to whoever reads it, will be found to contain the moſt pungent Invectives, that the Wit, Art, and Contrivance of Man, inſtigated by *Satan*, could invent. To ſay that this is not a Libel, is to ſay, that there is no Juſtice in the World. There can be no Court of Juſtice if the Houſe of Commons is not; and if the Houſe of Commons is not to be defended and have Protection at Law, yourſelves, your Houſes, cannot have Protection at Law. —— The Thing, you, Gentlemen of the Jury, are to go upon is, *Whether this Caſe doth not mean the Houſe of Commons*; for *we ſhall prove to you the Publication*.

[Here ſeveral Witneſſes were called, who proved *Owen* to have ſold the Pamphlet to them.]

Mr. Solicitor-general then ſpoke in Subſtance thus. — The Queſtion is, Whether the Jury is ſatisfied that the Defendant *Owen* publiſhed the Pamphlet. The reſt follows of Courſe, if the FACT is proved, the Libel proves itſelf, —— to be Sedition, Diſturbance, *&c.* If the *Publication* is proved, and that is what lies for your [the Jury] Determination, you being Judges of the FACT, the Judge determines the LAW. But ſuppoſe you Judges of the Law, your own Breaſts may tell you this is a Libel. It accuſes the Houſe of Commons of Injuſtice; compares them to the *Turkiſh* Divan, the Inquiſition, and calls them a *bribed* Aſſembly.

Next Mr *Ford* ſpoke in behalf of the Defendant, in Subſtance as follows. — Our Adverſaries [the Houſe of Commons] have great Power; nay, their Power is unknown even to themſelves. Though great, though wiſe this Houſe may be, yet they are but a Body of Men, and therefore *fallible*; for it is not in Men, or Bodies of Men to be *infallible*.—They have voted this a *Libel*. — The Caſe I ſhall inſiſt on is, the Fact charged in the Infor-

Information; which is, that the Defendant publiſhed this Pamphlet *maliciouſly, ſcandalouſly, falſely*, and *ſeditiouſly*. This Fact the Gentlemen have been very far from proving. *Only* proving the *Sale* of this Book, does not prove the hard Terms laid in the Charge againſt him. If his ſelling this Book maliciouſly, with a wicked Intent, is not proved, then the great Charge in the Information fails. Let the Gentlemen prove them, if they mean any Thing by theſe Words; if not, ſcratch them out; they are needleſs; which if they do, their Information will be very defective. Theſe Words conſtitute the Charge, which if they do not make out, will you, Gentlemen of the Jury, clap your Hands upon your Hearts, and ſay this Man is *guilty? Guilty* of what? — Nothing: — for nothing is proved; unleſs ſelling Paper is a Crime. — I muſt obſerve one Thing, which is, the Danger of finding a Verdict SPECIALLY. Suppoſe you find him *guilty* of *publiſhing*. *Guilty* includes *Guilt*. Then *guilty* of what; ſelling Paper? — Take Care, Gentlemen, of being deceived, by finding him *guilty*, ANY WAY. By bringing in your Verdict ANY WAY *againſt him*, you render him liable to the Conſequences of the WHOLE: That is, to the ſame Penalties that he would have been liable, if he had committed the whole Crime laid to his Charge, and that Charge proved againſt him. When you have brought in your Verdict, it will be in vain for you afterwards to ſay, you did *not intend* he ſhould be puniſhed; you only found, that he *publiſhed*, not *committed* the Crime. It will be in vain for you to petition for Mercy; Mercy will be in other Hands; it will be out of your Reach; and he will be at the Mercy of others, who may not look with the ſame Eyes as you. By finding him *guilty*, you do all that you can againſt him; and it will then be out of your Power to ſerve him. You MUST therefore conſider him GUILTY of this great Crime, OR NOT.

Then, that great Ornament of Law and Juſtice, Mr. PRATT, roſe up, and enlarged very finely upon every Part of Mr. *Ford*'s Argument, in a moſt maſterly and convincing Manner; and among a Number of additional Remarks, he took Notice, that the Privileges of Parliament are not to be known; nay not known wholly to themſelves; for they may be juſt what they pleaſe. But they have not puniſhed this Man, ſaid he; they have turned him over to the Common Law; therefore he muſt be tried by the Common Law. Yet they may take the Thing again into Conſideration, and puniſh him in the Houſe; and if ſo, he may be puniſhed twice for the ſame Fault, by two different Sentences; which by the Common Law a Man cannot. Much might be ſaid; more than we dare ſay for our Client in this Caſe. Our Mouths are already half ſhut; and the Tenets the Gentlemen lay down, is to ſhut them QUITE. But may you — this Nation — nor I — ever feel the *Effects* of ſuch Tenets, or ſee them put in *practice*.

[Several Perſons of Reputation were called to the Defendant's Character, who all proved him to be a good and loyal Subject.]

The Attorney-general then made a Speech in Anſwer to Mr. *Ford*'s and Mr. *Pratt*'s Argument, upon the Words *malicious, falſe, ſeditious, &c.* in the Information The Subſtance of which was, that thoſe Words were Words of Courſe, mere Matter of Form. After which, the Judge ſummoned up the Evidence; and delivered it as his Opinion, that the Jury OUGHT to find the Defendant *guilty*; for he thought the Publication was fully

fully proved; and if ſo, they could not *avoid* bringing the Defendant in *guilty*. The Jury went out, and ſtaid two Hours; when they came into Court, the Foreman anſwered for the reſt, and when the Queſtion was put, he ſaid, *Guilty*; NOT GUILTY, NOT GUILTY, MY LORD. The firſt Word *Guilty* being ſaid by Miſtake; upon which there was a loud Huzza; and the Jury went away. But at the Deſire of the Attorney-general, the Judge called the Jury into Court again, and at the Deſire of the Attorney aſked this *leading* Queſtion, *viz.* "Gentlemen of the Jury, "do you think the Evidence laid before you of *Owen*'s publiſhing the "Book by ſelling it, is ſufficient to convince you that the ſaid *Owen* did "ſell this Book?" At which the Foreman appeared a good deal fluttered; and the Judge repeated the Queſtion; upon which, the Foreman, without anſwering the Queſtion, ſaid, "NOT GUILTY, NOT GUILTY;" and ſeveral of the Jurymen ſaid, "*That* is our Verdict, my Lord, and WE ABIDE "BY IT." Upon which the Court broke up, with a prodigious Shout in the Hall. The Attorney deſired more Queſtions to be aſked, but the Judge would not, neither would the Noiſe permit it.

Note. The Jury could not ſay, to the Queſtion, that the Evidence of publiſhing was *not clear*, without Perjury: and if the Jury had anſwered *Yes*, and found the Defendant *not guilty*, one does not know what might have been done to the Jury; or before whom called. But they found the Defendant NOT GUILTY, on the WHOLE of the Caſe; and judged, as it was their GREAT DUTY ſo to do, as to FACTS, LAW, and JUSTICE OF THE WHOLE; and therefore did beſt, by not anſwering ſo leading a Queſtion as was *artfully* put to them.

The following are the Names of that brave and honeſt Jury, who thus nobly and immortally diſtinguiſhed themſelves in the DEFENCE OF ENGLISH LIBERTY.

Richard Barwell, Bread-ſtreet, *Forem.*	William Woolley, Cheapſide.
John Horton, Old Fiſh-ſtreet.	Richd. Bridgeman, Aldgate, High-ſt.
Thomas Smith, Watling-ſtreet.	Philip Grafton, Aldgate, High-ſtr.
Godfrey Lowe, Friday-ſtreet.	Samuel Lloyd, Devonſhire-ſquare.
Edward Berwick, Friday-ſtreet.	Henry Hall, St. Helens.
Richard Briſtow, Bread-ſtreet.	John Tuff, Biſhopſgate-ſtreet.

PROPOSALS *for engraving the* PORTRAITS *of ſuch beautiful* LADIES *as the* Subſcribers *to the* GENERAL MAGAZINE *ſhall be pleaſed to nominate, on the following Conditions:*

I. Each Subſcriber ſhall have the nominating a Lady he ſhall chuſe to have a Print of.
II. The Prints ſhall be elegantly engraved in the ſame Manner and Size as the Prints, here given, of their Royal and Serene Highneſſes the Prince and Princeſs of *Brunſwick*.
III. Each Subſcriber ſhall take Six *General Magazines*, in which a Print of the firſt Impreſſion ſhall be given.
IV The Ladies nominated muſt be of unexceptionable Reputation.
V. Each Nominator is to provide a Picture, Drawing, or Print of the Lady, which ſhall be carefully returned.

*** Ladies and Gentlemen, who are inclined to encourage this Undertaking, are deſired to ſend their Names and Places of Abode to their moſt humble Servant, *W. Owen*, in *Fleet-ſtreet*.

MATHEMATICAL

MATHEMATICAL CORRESPONDENCE.

New QUESTIONS *to be answered.*

Queſt. 7. *By Mr.* J. Barber, *Teacher of the Mathematics at* Saxmundham *in* Suffolk.

OF all the Parabolic Conoids of the ſame given Magnitude, to find that, which when ſuſpended by a String *n* Inches above its Vertex, ſhall vibrate the ſwifteſt poſſible.

Queſt. 8 *By Mr.* Thomas Walker, *of* Stantonbury, Bucks

GIven the Altitude of a Cone of Cork = 20 Inches, and the Diameter of its Baſe = 14 Inches: it is propoſed to caſe it with Lead, from the Vertex downwards, till juſt two Thirds of its Surface is covered, and then to place its Vertex downwards in a Tub of Rain Water; required the Thickneſs of the Lead, ſo as to ſink the Cone till its Baſe becomes level with the Surface of the Water?

Queſt. 9. *By Mr.* John Banks, *of* Grange, *in* Cumberland.

GIVEN the Diagonal of a Cylinder, to find the Axis and Diameter, when the Solidity is a Maximum.

Queſt. 10. *By Mr.* Iſaac Dalby, *of* Quarhouſe, *in* Glouceſterſhire.

HOW many different Ways is it poſſible to pay 20l. without uſing any other Coin than Angels, Guineas and Moidores?

*** *We ſhall inſert the Solutions to the Queſtions in our firſt Magazine in our next, and ſhall always keep at leaſt a Month's Diſtance between the Queſtions and their Solutions, that our ingenious Contributors, who live in the Country, may have Time to conſider them.*

We likewiſe intreat our Correſpondents to be careful not to ſend any Queſtions which have been already publiſhed, as ſuch a Procedure will unavoidably reflect Diſhonour on themſelves. We are ſorry to ſay, that this has been already attempted, particularly by one Gentleman (from whom we expected better Treatment), who ſent us a Queſtion tranſcribed from Simp. Fluxions.

To the Proprietor of the GENERAL MAGAZINE.

SIR,

BY inſerting the following Computations in your next *General Magazine*, you will greatly oblige your conſtant Reader and humble Servant,

A Turnpike Surveyor, from Stafford *To* Ireland's Croſs, *and* Stone.

The Moon's Eclipſe, *March* 17, 1764.

		h	′	″
Apparent Time at Stafford, P. M.	Beginning	10	37	0
	Middle	12	0	4
	End	1	23	40
	Duration	2	46	40
	Digits eclipſed	8	30	48

The Computation of an Occultation of the Star α ♍ *by the Moon,* April 15, 1764.

		h	′	″
Apparent Time at *Stafford*, P. M.	Immerſion	9	26	30
	Emerſion	10	42	10

The Sun's Eclipſe, April 1, 1764.

		h	′	″
Apparent Time at *Stafford*, in the Morning	Beginning	9	15	45
	Middle	10	40	15
	End	12	10	50
	Duration	2	55	5
	Quantity eclipſed	Annular		

*** *This Gentleman alſo favour'd us with a Calculation of the General Phænomena, which muſt be omitted for want of Room.*

A Calculation of the great Solar Eclipſe for Greenwich. *By Mr.* ISAAC TARRATT, *of* Epſom.

1764, April 1ſt, *Apparent Time at* Greenwich.

	h	′	″
Beginning of the Eclipſe (in the Morning)	9	0	0
Beginning of the annular Appearance	10	25	42
Middle of the Eclipſe	10	28	50
End of the annular Appearance	10	32	30
End of the Eclipſe	12	4	0
Duration of the Annular Appearance	0	6	48
Duration of the Eclipſe	3	4	0

Digits eclipſed 11° 20′

This ingenious Gentleman informs us, "That he made the above Calculation from "Tables which were conſtructed by an eminent Aſtronomer; and as it differs from all "the Calculations which he has ſeen (and from many of them very widely) he deſires to "ſubmit it to the Teſt of Time and accurate Obſervation."

A Calculation *of the great* Solar Eclipſe, 1764, April 1, *by Mr.* B. Talbot, *from Manuſcript Tables.*

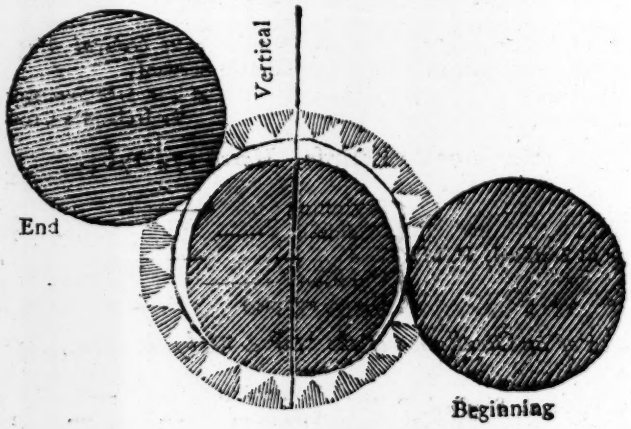
Apparent Time, in the Morning,

	At Cank, *in* Staffordſhire.			*At* Greenwich.		
	h	′	″	h	′	″
Beginning	8	57	20	9	5	52
Middle	10	20	24	10	30	26
End	11	53	00	12	3	30

I make this Eclipſe annular at *London*, the Moon's South Limb being within, (or North of) the Sun's, about 45″. —— At *Conk*, the Sun's Light, at the greateſt Obſcuration, will be about 3′ 15″, therefore not annular there.

A Calculation *and* Type *of the ſame Eclipſe for* London *and* Greenwich. *By Mr.* G. Witchell, *Teacher of the Mathematics.*

Type for London, *or* Greenwich.



1764, *April* 1. Apparent Time in the Morning

	At *London*.			At *Greenwich*.		
	h	′	″	h	′	″
Beginning of the Eclipſe	9	2	43	9	3	6
Middle, or greateſt Obſcuration	10	28	8	10	28	34
End of the Eclipſe	12	0	4	12	0	29
Duration	2	57	21	2	57	23
Magnitude or Quantity eclipſed	11°	0′	37″	11°	1′	37″

A Calculation of the general Phænomena. By the ſame.

	Ap. Ti. *London*	Latitude.	Longitude from *London*	Places.
	H. ′	° ′	° ′	
The Penumbra firſt touches the Earth's Diſk, and the Eclipſe begins at Sun riſing	7 27	1 6 S	21 37 W.	In the *Atlantic* Ocean.
The central Penumbra firſt touches the Earth's Diſk, and the Sun riſes centrally eclipſed	8 51	17 54 N	44 12 W.	In the *Atlantic* Ocean.
The Sun centrally eclipſed in the Nonageſſimal Degree	10 21	46 43 N	0 11 E.	In *France*, between *Rochelle* and *Angouleſm.*
Centrally eclipſed in the Meridian	10 59	60 52 N	15 13 E.	In *Sweden.*
The neareſt Approach of the central Penumbra to the North Pole.	11 32	75 45 N	88 11 E.	In the Icy Sea.
The central Penumbra leaves the Earth's Diſk, and the Sun ſetts centrally eclipſed	11 34	74 38 N	114 27 E.	In the Icy Sea.
The Penumbra leaves the Earth's Diſk, and the Eclipſe ends at Sun-ſett	12 57	56 1 N	82 50 E.	In the Deſerts of *Tartary.*

P. S. Thoſe who deſire a more particular Account of the Paſſage of the Shadow over *England*, *France*, *Flanders*, and *Holland*, may have Recourſe to the Map which I lately publiſhed (*vide* the Advertiſement on the blue Cover of this Magazine), which I hope will afford them Satisfaction.

N. B. *As the Attention of the Curious in Aſtronomy will be ſhortly excited by the moſt remarkable Phænomenon, which has happened for many Years paſt, we intreat the Ingenious Gentlemen who ſhall obſerve the enſuing great Solar Eclipſe, to tranſmit their Obſervations to Mr.* W. Owen, *Bookſeller, in* Fleet-ſtreet, *he having engaged Mr.* Witchell *to furniſh a correct Map of the real Paſſage of the Shadow over* England, *&c. which will be publiſhed, as ſoon as poſſible, in this* Magazine.

Apparent Times of the Eclipſes of the Satellites of Jupiter *which will happen in* March, 1764, *computed, from New Tables, to the Meridian of the* Royal Observatory *at* Greenwich.

I. Satellite. Emerſions.				II. Satellite. Emerſions.				III. Satellite.				IV. Satellite.			
D	H.	M.	S	D	H.	M.	S.	D	H.	M.	S.	D	H.	M.	S.
2	14	24	44	20	7 *	17	53	2	21	43	15	1	3	53	23 I
4	8 *	53	58	22	1	47	6	6	11 *	3	4	1	16	1	55 E
6	3	23	13	23	20	16	45	10	0	23	7	8	17	55	43 I
7	21	51	47	25	14	46	8	13	13	43	14	8	20	5	7 E
9	16	21	47	27	9 *	15	31	17	3	2	23	15	21	57	53 I
11	10 *	51	10	29	3	44	53	20	16	23	31	16	0	8	43 E
13	5	20	29	30	22	14	15	24	5	43	37	23	1	59	48 I
14	23	49	59					27	19	3	41	23	4	12	28 E
16	18	19	20					31	8 *	23	30	30	6	1	22 I
18	12	48	31									30	8 *	15	36 E

Thoſe marked * are viſible at *Greenwich.*

Barometrical Observations, *made at* Stanton-Bury, Bucks, *Lat.* 52° 4′ N. *Long.* 47′ W. *from* London, Jan. 1764. *By* T. Walker.

D	Inch.	D	Inch.	D	Inch.	D	Inch.
1	29.32	9	29.75	17	29.98	25	29.50
2	29.25	10	29.70	18	29.76	26	29.89
3	28.95	11	29.82	19	29.00	27	29.90
4	29.00	12	29.90	20	31.25	28	29.96
5	29.15	13	29.94	21	30.75	29	29.90
6	29.34	14	29.79	22	30.70	30	30.00
7	29.50	15	29.75	23	30.00	31	30.25
8	29.75	16	29.80	24	30.24		

To the Author of the GENERAL MAGAZINE.

SIR,

AS the Seaſon, for eight Months paſt has been chiefly wet, and great Floods; the following is an Account of Dry and Rain for the laſt ten Years, with the Number of Days in each Month for the laſt five Years.

H——, Hertfordſhire, *I am, Yours, &c.*
Feb. 1764. G. H——ll.

Years.	Fair or Dry each Year.	Rain or Snow each Year.	1759. Fair or Rain, Dry, &c.		1760. Fair	1760. Rain.	1761. Fair	1761. Rain.	1762. Fair	1762. Rain	1763. Fair	1763. Rain
			Jan. 20	11	11	20	26	5	21	10	25	6
			Feb. 24	4	19	10	13	15	13	15	5	23
1754	225	140	Mar. 20	11	24	7	26	5	11	20	19	12
1755	203	162	Apr. 19	11	27	3	24	6	20	10	18	12
1756	231	135	Mar. 13	8	18	13	17	14	25	6	20	11
1757	231	134	June 16	14	17	13	11	19	22	8	16	14
1758	214	151	July 25	6	25	6	22	9	22	9	3	28
1759	247	118	Aug. 18	13	19	12	15	16	18	13	6	25
1760	227	139	Sept. 20	10	20	10	15	15	20	10	13	17
1761	226	139	Oct. 22	9	10	21	20	11	15	16	23	8
1762	238	127	Nov. 18	12	19	11	18	12	22	8	9	21
1763	163	202	Dec. 22	9	18	13	19	12	29	2	6	25
	2205	1447		247	118	227	139	226	139	238	127	163	202

REMARK.

Dec. 1762, and Jan. 1763, very dry and dusty,
Dec. 29 Dry, 2 Rain: Jan. 25 Dry, 6 Rain.
Dec. 1763 and Jan. 1764, great Rains and Floods,
Dec. 6 Dry, 25 Rain: Jan. 5 Dry, 26 Rain.
1762 and 1763, Dec. and Jan. 54 Dry, 8 Rain
1763 and 1764, Dec. and Jan. 11 Dry, 51 Rain

65 Dry, 59 Rain
Feb. 1764, 1 Dry, and 11 Rain.

To make red Coral Branches, for embelliſhing of GROTTOS.

TAKE clear Roſin, diſſolve it in a Braſs Pan; to one Ounce thereof add two Drachms of the fineſt Vermillion; when you have ſtirred them well together, and have choſe your Twigs and Branches, peeled and dried, take a Pencil and Paint theſe Twigs all over, whilſt the Compoſition is warm, and ſhape them in Imitation of natural Coral of a Black Thorn; when done, hold it over a gentle Coal-fire; turn the Branches with your Hand about, and it will make it all over ſmooth and even, as if poliſhed. In the ſame Manner you may, with white Lead, prepare white; and with Lampblack, black Coral.

A

A beautiful Grotto may be built at a very little Expence with Glaſs Cinders, which may eaſily be had, Pebbles or Pieces of large Flint, and embelliſh it with ſuch counterfeit Coral, *Amber*, * Pieces of Looking-glaſs, Oyſter, Muſſel, and Snail Shells, Moſs, Pieces of Chalk, Oar, *&c.* The CEMENT to bind them together is as follows.

Take two Parts of white Roſin, melt it clear, add to it four Parts of Bees-wax; when melted together, add Stone-flower, of the Stone you deſign to cement, two or three Parts, or ſo much as will give the Cement the Colour of the Stone; to this add one Part of Flower of Sulphur; firſt incorporate all together over a gentle Fire, and afterwards knead it with your Hands in warm Water. With this, cement the Stones after they are well dried and have been warmed before the Fire, in order to receive the cement the better.

*** *We propoſe to inſert, as Room will permit, ſcarce and valuable* Secrets *and uncommon* Experiments, *which may be of real uſe as well as Amuſement to the Ingenious.*

* See Page 32.

POETRY.

Verſes written by an unfortunate young Lady.

OH that no virgin would incline an ear
To wild profeſſions of inconſtant youth,
But nobly ſcorn a ſentiment to hear,
That dares to laugh at innocence and truth.

For if no quick reſentment ſhe reveals
Time will convince her dearly to her coſt,
That ſtep by ſtep the ſweet deluſion ſteals,
'Till fame and honour are forever loſt.

The female mind may bid its terrors ceaſe,
Who never made her ſofter feelings known,
Nor dread a thought deſtructive of her peace,
While prudence tells her to conceal her own.

But if, alas, in ſome unguarded hour,
From this advice ſhe madly ſhould depart,
She gives the lover an unbounded power
To act the villian, and to break her heart.

No more the fair to this ſad criſis drove,
In ſenſe or ſoul ſuperior can confide;
For when has reaſon triumph'd over love,
Or inclination been ſubdu'd by pride?

Ay Heav'n! to whom my pray'r is now addreſs'd,
Why are we ſubject to ſo hard a fate,
That though the eaſy fondneſs of our breaſt
Be ſtill abus'd, we never wiſh to hate?

Or ev'n this moment when my grief has ſtole
The aching tribute of a falling tear,
I feel a fooliſh ſomething in my ſoul
Declare my crafty traitor ſtill is dear.

Alas! the anguiſh I am doom'd to prove
From rankling paſſion ſurely muſt begin;
Theſe briny drops proceed from ſlighted love
And, pardon heav'n! not ſorrow for my ſin.

But, gracious pow'r, remove each ſofter trace,
That brings his faithleſs image to my eyes:
For as I've found him infamous and baſe,
It is but juſt to hate him and deſpiſe.

To the Authors of the General Magazine, &c.

Gentlemen,

IF the following Tranſlation is found worthy your Notice, its Inſertion will oblige,

Yours a Subſcriber.

THIS day *Condamine*, that ſpirit of whim,
Of the immortal **forty's* a Member become;
But *Condamine's* deaf——the better for him,
And happy the reſt, were *Condamine* dumb.

* Or *flock is.*

ÆNIGMA *for the* LADIES.

YE lovely fair, who riddles often write,
Attention give to what I now indite.
In muſicks ſofteſt charms I have a hand,
And oft make one in Vulcan's noted band;
With city maids and country dames I'm ſeen,
When *Sol* makes eaſtern climates moſt ſerene;
And when the weſtern ſkies his beams alight,
Fair *Sylvia* gay, does oft require my ſight:
When bluſtering *Boreas* reigns triumphant here,
I frequently in company appear.
With grand phyſog, I ſwell and heave amain,
Yet rarely ſeen upon the rural plain.
Familiar I'm to all, it is well known,
And by my actions your exiſtence ſhown:
I warrior-like have many darts in ſtore,
Which me inviron——no hero e'er had more,
But from no warlike deeds I've gain'd my fame,
Now from theſe hints, dear ladies, tell my name.

A REBUS.

TAKE a beaſt that is ſubtle and cunning by fate,
And a term us'd by lovers in conjugal ſtate;
Next a bird that is noted for ſinging moſt clear,
Then the time when bright *Phebus* quits our hemiſphere;

What

What ſhocks the proud heart and the wildeſt does tame,
And a beaſt that is uſeful for ſtrength, and for fame;
So for a concluſion (to what's above penn'd)
Join what we oft hear from an intimate friend:
The initials connected, will ſtraightly appear,
The name of a village in *Northamptonſhire*.

ÆNIGMA, *addreſſed to Mr.* Thomas Sadler.

I Am a moſt profound logician,
Likewiſe an eminent phyſician,
To all the world, I can impart
The ſecrets of the ſtateſman's heart.
Can make the ſtupid booby wiſe,
And maſter fribble ſhut his eyes,
Of melancholick pains can eaſe you,
For, I, in fact, do often pleaſe you;
Such wonders do, when e'er I pleaſe,
As ne'er was done by *Hercules*.
Perhaps, dear ſir, you will infer,
That I am no great traveller,
Though, learn'd aſtronomers will ſay
They've ſeen me in the milky way.
Momus, has own'd me for his brother,
Indeed we are ſo like each other,
You'd ſcarcely know one from another.
To *Morpheus* I am near ally'd;
And twenty goddeſſes beſide,
What, artleſs, I have now conceal'd;
Will, by friend *Sadler* be revealed.

A NEW-YEAR'S ODE. *To* LESBIA.

I.

THE rolling year begins his courſe,
The ſun will ſoon renew his force,
And brighten Nature's face;
Freſh verdure cloath the trees again,
Gay flow'rs adorn the ſmiling plain
With youthful blooming grace.

II.

But we, my *Leſbia*, we ſhall ne'er
Renew our vigor like the year,
(When vigour's paſt the prime)
When age ſhall furrow o'er your face,
You then will curſe your faithful glaſs,
And I, neglected time.

III.

We both have paſs'd our youthful ſpring,
Our ſummer too is on the wing,
And blames us ev'ry hour:
Yet tho' our youthful ſpring is paſt,
Tho' ſummer flies away ſo faſt,
Still autumn's in our pow'r.

IV.

Yes, golden autumn is our own,
Whoſe ripen'd vintage waits to crown
My *Leſbia*'s love, and mine;
Then let us never paſs it o'er,
But preſs the juicy fruit, before
It withers on the vine.

IMITATION *of* THEOCRITUS. *By the late Mr.* JAMES HERVEY.

WHen ſnows deſcend, and robe the fields
In winter's bright array;
Touch'd by the ſun, the luſtre fades,
And weeps itſelf away:
When ſpring appears, when violets blow,
And ſhed a rich perfume;
How ſoon the fragrance breathes its laſt!
How ſhort-liv'd is the bloom!
Freſh in the morn, the ſummer-roſe
Hangs withering ere 'tis noon;
We ſcarce enjoy the balmy gift,
But mourn the pleaſure gone.
With gliding fire, an evening ſtar
Streaks the autumnal ſkies;
Shook from the ſphere, it darts away,
And, in an inſtant, dies.
Such are the charms that fluſh the cheeks,
And ſparkle in the eye:
So, from the lovely finiſh'd form
The tranſient graces fly;
To this the ſeaſons, as they roll,
Their atteſtation bring:
They warn the fair; their every round
Confirms the truth I ſing.

Imitated from CASSIMER. *By the ſame.*

CHild of the ſummer, charming roſe,
No longer in confinement lie;
Ariſe to light, thy form diſcloſe;
Rival the ſpangles of the ſky:
The rains are gone; the ſtorms are o'er;
Winter retires to make thee way;
Come then, thou ſweetly-bluſhing flower;
Come, lovely ſtranger, come away.
The ſun is dreſs'd in beaming ſmiles,
To give thy beauties to the day;
Young Zephyrs wait, with gentleſt gales,
To fan thy boſom, as they play.

JUVENAL *imitated.* *By the ſame.*

SInce all the downward tracts of time
God's watchful eye ſurveys;
O! who ſo wiſe to chuſe our lot,
And regulate our ways?
Since none can doubt his equal love,
Unmeaſurably kind;
To his unerring, gracious will,
Be ev'ry wiſh reſign'd.
Good when he gives, ſupremely good;
Nor leſs, when he denies;
Even croſſes, from his ſovereign hand,
Are bleſſings in diſguiſe.

On the CAMERA OBSCURA.

YIeld *Raphael*, *Titian* yield, whoſe mimic ſtriſe
Would warm th' unwilling canvas into life;
Colours more true ſhall in my landſkip glow,
If equal to my theme my numbers flow;
The cloud-topt ſummit, or enamel'd lawn,
Woods, rivers, ſeas, by nature's pencil drawn;
By art contracted ſhall aſſiſtance bring,
And from their blended charms a fair creation ſpring.
Thro' the ſmall portal, ſee a gath'ring ray,
To the dark room tranſmit a doubtful day!
Spontaneous beauties fill th' extended ſcroll,
Reflected ſtreams with ſilent motions roll;
Here yellow fields beneath the Zephyrs move,
There living green adorns the waving grove;
Scenes follow ſcenes, 'till hills the view confine,
Or ſkies and ocean undiſtinguiſh'd join.
So, as in *Homer*'s ſacred verſe diſplay'd,
When the god's touch the ductile maſs obey'd.
The growing ſhield extends it's poliſh'd round,
And earth, air, ſea, within its verge are found.
Far as mid ocean ſhou'd the proſpect rove,
Down ſinks the ſky, the ocean rolls above.
But wilder glories cloath reflected day,
And gentler ſunbeams on the waters play.
See o'er the reſt, inverted earth appear,
And tow'rs, and mountains headlong hang in air!
Thus ſimple ſwains th' Antipodes admire,
And gaping, wonder they ſhou'd fall no higher.
But ſhou'd, whilſt we behold, ſome gath'ring ſtorm
The ſmiling ſurface of the deep deform;
In the ſmall chart, the warring ſeas engage,
And mimic light'nings ſpend their feeble rage.
Yet, as the ſurges daſh, we view with pain,
In leſſen'd horrors of an humbler main;
The ſhatter'd barks amidſt the billows toſt,
And little lives in circling eddies loſt,
The winds are ſilent, and the waves ſubſide,
And light-trim'd veſſels ſkim the dancing tide.
Binds the ſlack cordage as the breezes blow,
The downward ſtreamers glitt'ring float below.
Now o'er the ruſſet plain the courſer bounds,
On the green turf the rolling chariot wounds;
With inſect beaus the gaudy picture ſwarms,
And nymphs contract to miniature their charms.
Or ſhou'd the humbler maids and rural ſwains,
The dances mingle on the neighb'ring plains;
Reflected figures on the landſkip move,
Recede, advance, reject, or offer love.
Pleas'd we obſerve — when ah! intruding light
From the dark chamber drives the noon-day night;
Lies, ocean, mountains, vaniſh ſwift away,
And every lovely phantom ſinks in day.
So fairy elves, in moon-light ſhadows ſeen,
With magic circles mark'd the ſpangled green.
But when the glowing ſun his *Thetis* leaves,
And light firſt bluſhes o'er the eaſtern waves;
The trembling ſprites ſtart at the ſacred fire,
And from their myſtic dance, ſcar'd and confus'd retire.

To a LADY, *ſent with a Preſent of Shells and Stones deſigned for a Grotto.*

WITH gifts like theſe, the ſpoils of neighb'ring ſhores,
Th' *Indian* ſwain his ſable love adore,
Off'rings well-ſuited to the duſky ſhrine
Of his rude goddeſs, but unworthy mine.
And yet they ſeem not ſuch a worthleſs prize,
If nicely view'd by philoſophic eyes;
And ſuch are yours, that Nature's works admire
With warmth like that, which they themſelves inſpire.
To ſuch, how fair appears each grain of ſand,
Or humbleſt weed, as wrought by Nature's hand?
How far ſuperior to all human pow'r
Springs the green blade, or buds the painted flow'r?
In all her births, tho' of the meaneſt kinds,
A juſt obſerver entertainment finds;
With fond delight her low production ſees,
And how ſhe gently riſes by degrees,
A ſhell, or ſtone, he can with pleaſure view,
Hence trace her nobleſt works, the heav'ns — and you.
Behold how bright theſe gaudy trifles ſhine,
The lovely ſportings of a hand divine!
See, with what art each curious ſhell is made,
Here carv'd in fretwork, there with pearl inlaid!
What vivid ſtreaks th' enamell'd ſtones adorn,
Fair as the paintings of the purple morn!
Yet ſtill not half their charms can reach our eyes,
While thus confus'd the ſparkling chaos lies;
Doubly they'll pleaſe, when in that grotto plac'd,
They plainly ſpeak their fair diſpoſer's taſte;
Then glories, yet unſeen, ſhall o'er them riſe,
New order from your hand, new luſtre from your eyes.
How ſweet, how charming will appear this grott,
When by thy art to full perfection brought!
Here verdant plants and blooming flow'rs will grow,
There bubbling currents through the ſhell-work flow;
Here coral mix'd with ſhells of various dyes,
There poliſh'd ſtones will charm our wand'ring eyes.
Delightful bow'r of bliſs! ſecure retreat!
Fit for the muſes, and *Stanira*'s ſeat.

But

But ſtill how good muſt be that fair one's mind,
Who thus in ſolitude can pleaſure find?
The muſe her company, good ſenſe her guide,
Reſiſtleſs charms her pow'r, but not her pride:
Who thus forſakes the town, the park and play,
In ſilent ſhades to paſs her hours away;
Who better likes to breathe freſh country air,
Than ride impriſon'd in a velvet chair;
And makes the warbling nightingale her choice
Before the thrills of *Farinelli*'s voice;
Prefers her books, and conſcience void of ill,
To conſorts, balls, aſſemblies, and quadrille;
Sweet bow'rs more pleas'd than gilded chariots ſees,
For groves the play-houſe quits, and beaus for trees.
Bleſt is the man, whom fate ſhall grant one hour,
With ſuch a lovely nymph in ſuch a lovely bow'r!

A Candid Review *of* New Books.

Article 1. *The Life of the Right Honourable Sir* John Holt, *Knight*; Lord Chief Juſtice of the Court of King's Bench, *&c. Worral, Price* 3*s.* 6*d.* 8*vo. bound.*

This is not barely the Life of the celebrated Lord Chief Juſtice *Holt*, as an Article of Biography; but it is alſo his Lordſhip's many learned and judicious Arguments and Opinions, upon ſeveral great and important Caſes, not before made public, particularly Lord *Banbury*'s, the *Banker*'s, *Lane* againſt *Cotton*, the King againſt *Plummer*, *Coggs* againſt *Barnard*, *Aſhby* againſt *White*, the Queen againſt *Paty*, and the Queen againſt *Mawgride*, together with many others; and an alphabetical Table of References to all his Lordſhip's Arguments and Reſolutions in the ſeveral Volumes of Reports digeſted under proper general Heads. To Lawyers, and all others concerned in the Law, this Book may be uſefully read, with much Inſtruction: To them we therefore recommend it as extremely proper for their peruſal; nor will it be found leſs entertaining to every *Engliſh* Man (not of the Profeſſion) who will ever eſteem and admire the wiſe and upright Conduct of that great and able Judge.

Art. 2. *The Hiſtory of Kamtſchatka, and the Kuriliſki Iſlands, with the Countries adjacent. Illuſtrated with Maps and Cuts. Publiſhed at Peterſbourg in the Ruſſian Language by order of her Imperial Majeſty, and tranſlated into Engliſh by James Grieve, M. D.* Jefferys. Price 16*s.* 4to. ſewed.

Kamtſchatka is a Part of *Siberia* at preſent but very little known, being a Peninſula in the North-Eaſt of *Aſia*, to which the *Europeans* very ſeldom adventure; nor is it indeed worth their while, for by what we can find in this Book, which is doubtleſs a very accurate Account, there is no Commerce for any Thing to a trading People worth ſeeking after. Yet the Deſcription of this barbarous Nation is curious and entertaining, and it may be very juſtly deemed a valuable Addition to the republic of Letters. The Work is divided into 4 Parts, the firſt is Geographical, the ſecond is Natural Hiſtory, the third is the Cuſtoms, Manners, Religion, *&c.* and the fourth contains the Diſcovery and Conqueſt of *Kamtſchatka* by the *Ruſſians*. Every Part of this Book is ſo ſingular and new to the *Engliſh* Reader, that we cannot omit laying before him, as a Specimen of the Work, the Account of ſome of the hot Springs, aſſuring him at the ſame Time that in almoſt every other Part it is not leſs entertaining.

"Amongſt the Springs upon the South Bank it is to be remarked, that one Place is full of Openings of very different Diameters, where the Water is thrown up two Feet and a half with a great Noiſe, the Thermometer which in the open Air ſtood at 5 Degrees roſe to 15 Degrees.

"The Springs of the Great River fall into it in one conſiderable Stream, which runs between the ſtony Hills in a narrow Channel. The Banks are boggy, and the Bottom ſtony, covered with Moſs. From its Spring to the Place where it falls into the Great River is 261 Fathoms: At the Spring the Mercury roſe in *De l'Iſle*'s Thermometer to 23, and *Farenheit*'s to 185 Degrees; thence, to where it falls into the River, it grew cooler gradually, ſo that at the Mouth *De l'Iſle*'s Thermomer only roſe to 11, and *Farenheit*'s to 74 Degrees; in the open Air the one ſtood at 175, and the other at 14 Degrees.

"The hot Brook that is near the River *Shematche*, and falls into the Eaſtern Ocean, is much larger than any of the above mentioned. At its Mouth it is three Fathoms broad, and in ſome Places four Feet deep, and its Length is three Verſts (a *Ruſſian* Ver-

Verſt is 500 Fathom or 3500 Feet) and 88 Fathoms. It runs between high ſtony Hills with a ſtrong Current; its Bottom is a hard Stone covered with green Moſs, which, in ſtill Places, ſwim upon the Surface. Near the Banks at its Mouth the Heat is like that of Summer Water; and towards the Head the Graſs Plants upon the Banks were green, and ſome of them flowered in *March*. In going from this River to the laſt hot Spring that lays upon the River *Shematchi*, one muſt paſs a great Ridge of Hills. Upon the Eaſt Side of this Ridge, near the ſummit, is an even Plain covered with round Grey Stones, without any Plants growing upon it. Upon this Plain, in ſeveral Places, a Vapour aſcends with great Force, and a Noiſe reſembling Bubbling of Water is heard: Here I dug, expecting to find Water, but I found a Stratum of ſuch hard ſtone that we could not dig through it. It is probable that the Waters of the warm Brook that falls into the Eaſtern Ocean have their Origin from this Place; for it is directly oppoſite to the riſe of that Brook; and the laſt Stream that falls into the River *Shematchi* is likewiſe thought to derive its Source from the ſame Place, as it riſes from this Ridge upon the Weſt Side in a deep Hollow ſurrounded with ſmoking Hills. The very Bottom itſelf is full of boiling Springs for near a Verſt and a half, all which join at laſt in one Stream.

In this Bottom are two large Wells that deſerve particular notice: One is five, the other three Fathoms diameter; the firſt one and a half, the other one Fathom deep. In theſe the Water boils up with white Bubbles, and makes ſuch a Noiſe that one Perſon cannot hear another in the common way of ſpeaking; nay, ſcarcely when he cries aloud. The Vapour is ſo thick that one cannot ſee a Man at ſeven Fathoms Diſtance, and the boiling of the Water is only to be obſerved by lying down upon the Ground. The Earth between theſe Wells yields like a Bog, ſo that one is in continual fear of ſinking in. The Water of theſe Springs is diſtinguiſhed from all others by a black Matter, like *Chineſe* Ink, that ſwims upon the Top, which ſticks ſo to the Fingers that one cannot without difficulty waſh it off. They have in common with other hot Springs, Clay, Lime, Alum, and Sulphur of various Colours. In all the above-mentioned Springs the Water is thick and ſtinks like rotten Eggs.

The *Kamtſchadales* eſteem all the burning Mountains and Places where hot Springs riſe as the Habitations of Spiris, and approach them with Fear; but, as the latter are moſt dangerous, they are under the greateſt awe of them; and therefore they never willingly diſcover them to any *Ruſſian*, leſt they ſhould be obliged to accompany him near them. It was by chance that I heard of them, after I had travelled 100 Verſts from the Place; but this natural Phænomenon appeared ſo curious, that I returned to examine it. The People of *Shematchinſki* Village were obliged to declare the true Reaſon why they had not formerly diſcovered them, and, much againſt their will, were forced to ſhew me the Place, but would not go near it; and when they ſaw that we lay in the Water, drank it, and eat Things boiled with it, they expected to ſee us periſh immediately: But when they perceived this did not happen, they told it in the Village as an uncommon Wonder, and looked upon us as very extraordinary People, ſince even the Devils could not hurt us.

This is remarkable, that North from the Mouth of the River *Kamtchathæ*, and Weſt along the Courſe of the River *Oſernoi*, there are no hot Springs, although it abounds in Pyrites, Sulphur, Iron Ore, and Stones that yield Alum and Vitriol. Mr. *Steller* obſerves, that the Appearance of the Country of *Kamtſchatka*, and the frequent Earthquake there, give Reaſon to think that it is full of Caverns replete with combuſtible Matter, which, taking fire in the Bowels of the Earth, produce Earthquakes, and makes thoſe vaſt Alterations of which we ſee numerous Inſtances in rocky Shores being torn off both upon the Beaver Sea, and in the Iſlands, that which lie between *Aſia* and *America*. The combuſtible Matter, he tells us, is kindled by the ruſhing into thoſe ſubterraneous caverns through their Apertures towards the Sea; which Hypotheſis is ſtrengthened by his Obſervation, that Earthquakes are moſt frequent about the Equinoxes, when the waves of the Sea are driven by the great Storms with uncommon Violence upon the Shores, and eſpecially about the Spring Equinox, at which Time the Water always riſes higher than at any other; and the Inhabitants of *Kamtſchatka* and the *Tburiles* know this ſo well that they always fear the beginning of *March* and the end of *September*.

It is very extraordinary that no Iron has been diſcovered here, although ſome Ore is obſerved mixed with Clay and Earth, to which Sulphur being added the ſubterraneous Fires may eaſily be accounted for; nor do we yet know of any ſalt Springs, although the Narrowneſs of the Ithmus of the Peninſula of *Kamtſchatka*, and ſo many ſubterraneous Caverns under the rocky Hills which have Communication with the Sea,

ſhould give us Reaſon to conclude that there muſt be ſome.

After the hot Springs, we ought to take Notice of the Rivers that never freze. Theſe are ſo common in *Kamtſchatka* that there is ſcarcely one River which has not ſome very large Openings even in the moſt ſevere Froſts; and the Plains under the Hills are ſo full of Springs that one cannot go dry any where in the Summer. Theſe Springs, which joining make a little Rivulet and fall into the *Kleutchowa Kamtſchatka*, never freeze, and yield Fiſh almoſt the whole Winter, which gives an Advantage to the *Kleutchova*, as it furniſhes not only the *Kamtſchadales* but all the People of the *Oſtrog* of *Niſhniſhantalſky* with freſh Fiſh, which is generally eſteemed, on Account of its ſcarcity at that Time, as a very great Delicacy. This may alſo account for the wholſomneſs of all theſe Waters, which the Inhabitants drink after eating the fatteſt Fiſh without the leaſt Harm, although in other Places cold Water drank upon fat Fiſh produces the Bloody-flux."

ART. 3. ANECDOTES *of* PAINTING *in* ENGLAND; *with ſome Account of the principal Artiſts; and incidental Notes on other Arts, collected by the late Mr.* George Virtue, *and now digeſted and publiſhed from his original MSS. By Mr.* HORACE WALPOLE, *Vol.* 3. *with a Catalogue of Engravers. Printed at* Strawberry-hill. 2 *Vols. 4to. Price* 1*l.* 10*s. ſewed.*

Strictures on the Merit of COOPER, *a Miniature Painter in the Reign of* Charles II. *and on the Characters of* Oliver Cromwell, *and the Earl of* Stafford.

By Mr. WALPOLE.

SAMUEL COOPER owed great Part of his Merit to the Works of Vandyck, and yet may be called an original Genius; as he was the firſt who gave the Strength and Freedom of Oil to Miniature. The Works of Oliver [a cotemporary Miniature Painter] are touched and retouched with ſuch careful Fidelity, that you cannot help perceiving they are Nature in the Abſtract; Cooper's are ſo bold that they ſeem perfect Nature, only of a leſs Standard. Magnify the former, they are ſtill diminutively conceived: If a Glaſs could expand Cooper's Pictures to the Size of Vandyck's, they would appear to have been painted for that Proportion. If his Portrait of * Cromwell could be ſo enlarged, I don't know but Vandyck would appear leſs great by the Compariſon. To make it fairly, one muſt not meaſure the Fleming by his moſt admired Piece, Cardinal Bentivoglio: The quick Fineſſe of Eye in a florid Italian Writer was not a Subject equal to the Protector; but it would be an amuſing Trial to balance Cooper's Oliver and Vandyck's Lord Straſford. To trace the Lineaments of equal Ambition, equal Intrepidity, equal Art, equal Preſumption, and to compare the Skill of the Maſters in repreſenting the one exalted to the height of his Hopes, yet perplexed with a Command he could ſcarce hold, did not dare to relinquiſh, and yet dared to exert; the other, daſhed in his Career, willing to avoid the Precipice, ſearching all the Receſſes of ſo great a Soul, to break his Fall, and yet ready to mount the Scaffold with more Dignity than the other aſcended the Throne. This Parallel is not a Picture drawn by Fancy; if the Artiſts had worked in Competition, they could not have approached higher to the Points of View in which I have traced the Characters of their Heroes.

Cooper with ſo much Merit had two Defects. His Skill was confined to a mere Head; his Drawing even of a Neck and Shoulders ſo incorrect and untoward, that it ſeems to Account for the Numbers of his Works unfiniſhed. It looks as if he was ſenſible how ſmall a Way his Talent extended. This very Poverty accounts for the other, his Want of Grace: A ſignal Deficience in a Painter of Portraits—yet how ſeldom poſſeſſed! Bounded as their Province is to a few tame Attitudes, how Grace atones for want of Action! Cooper, content, like his Countrymen, with the good Senſe of Truth, neglected to make Truth engaging. Grace in Painting ſeems peculiar to Italy. The Flemings and the French run into oppoſite Extremes. The firſt never approach the Line, the latter exceed it, and catch at moſt but a leſſer Species of it, the genteel which if I were to define, I ſhould call familiar Grace, as Grace ſeems an amiable Degree of Majeſty. Cooper's Women, like his model Vandyck's, are ſeldom very handſome. It is Lely alone that excuſes the galantries of Charles II. He painted an Apology for that Aſiatic Court.

Cooper died in London in 1672, aged 6[illegible]

ART. 4. GOTHAM, A Poem. Book I. *By* C. CHURCHILL. *Flexney. &c.* Price 2*s.* 6*d.* 4to.

Such a Poem from an ordinary Poet, or one who had not engaged the Attention of the Public in ſo extraordinary a Manner as Mr. *Churchill*, would paſs for a very fine Production; but coming from the ſame Hand which lately gave us thoſe truly excellent

* *This fine Head is in the Poſſeſſion of the Lady Frankland, Widow of Sir Thomas, a Deſcendent of Cromwell. The Body is unfiniſhed. Virtue engraved it, as he did another in Profile, in the Collection of the Duke of Devonſhire.*

cellent and admirable Pieces, entitled, *The Conference*, *Author*, and *Duellist*, it loſes half its Merit, becauſe it is not *equal* to them. He ſteps forth claiming the Monarchy of a new Kingdom by the Right of Diſcovery: And begins his Poem with ſome very ſatirical Remarks, too well founded upon Truth, on the *European* Conqueſts in the *Indies*, when Avarice wore the Cloak of Religion to diſpoſſeſs the Natives of their Right, and the Goſpel of Peace was ſupported and inculcated by Rapine and Murder.

Happy the Savage of thoſe *early* times
Ere *Europe*'s ſons were known, and *Europe*'s Crimes!
Gold, curſed Gold! ſlept in the Womb of Earth,
Unfelt its Miſchiefs, as unknow its Worth;
In full Content he found the trueſt Wealth;
In Toil he found Diverſion, Food and Health;
Strange to the eaſe and luxury of Courts,
His Sports were Labours, and his Labours Sports;
His Youth was hardy, and his Old Age green;
Life's Morn was vig'rous, and her Eve ſerene;
No rules he held, but what were made for uſe;
No Arts he learn'd, nor ills which Arts produce;
Falſe Lights he followed, but believ'd them true;
He knew not much, but liv'd to what he knew.
Happy, thrice happy *now* the Savage race,
Since *Europe* took their *Gold*, and gave them *Grace!*
Paſtors ſhe ſends to help them in their need,
Some who can't write, with others who can't read,
And, on ſure grounds the Goſpel Pile to rear,
Sends *Miſſionary* Felons ev'ry Year;
Our Vices, with more Zeal than holy pray'rs,
She teaches them, and in return takes theirs;
Her rank Oppreſſions give them cauſe to riſe,
Her Want of Prudence, Means, and Arms ſupplies,
Whilſt her brave rage, not ſatisfied with life,
Rising in blood, adopts the *Scalping-knife*;
Knowledge She gives, enough to make them know
How abject is their State, how deep their Woe;
The Worth of Freedom ſtrongly She explains,
Whilſt She bows down, and loads their necks with Chains;
With too She plants, for her own ends impreſt,
To make them bear the worſt, and hope the beſt;
And whilſt She teaches on vile int'reſt's plan,
As Laws of God, the wild decrees of man,
Like *Phariſees*, of whom the Scriptures tell,
She makes them ten times more the Sons of Hell.

Having pleaded Poſſeſſion, and inſtituted himſelf abſolute Monarch of this new diſcovered Country, he declares;

With *Europe*'s rights my kindred rites I'll twine,
Hers be the *Weſtern World*, be *Gotham* mine.

Every Founder of a Kingdom has an immemorial Right to all the Incenſe and Adulation which his Subjects can heap upon him; and our ſelf-erected Monarch boldly calls upon all Inſtruments, all Stages of Life, to rejoice, *&c. &c.* while he ſays,

All, one and all, ſhall in this Chorus join,
And, dumb to other's praiſe, be loud in mine.

We ſhall ſelect only the two Deſcriptions of *Childhood* and *Old Age*, and ſhall, we apprehend, leave the Reader with a full Appetite to ſit down and feaſt on this new Production of our prolific and nervous Poet.

Childhood who, like an *April* morn, appears,
Sunſhine and Rain, Hopes clouded o'er with Fears,
Pleas'd and diſpleas'd by ſtarts, in paſſion warm,
In Reaſon weak, who, wrought into a ſtorm,
Like to the fretful bullies of the deep,
Soon ſpends his rage, and cries himſelf aſleep,
Who' with a fev'riſh appetite oppreſs'd,
For trifles ſighs, but hates them when poſſeſs'd,
His trembling laſh ſuſpended in the air,
Half bent, and ſtroking back his long, lank hair,
Shall to his mates look up with eager glee,
And let his Top go down to prate of Me.

Old Age, a *ſecond Child*, by Nature curs'd
With more and greater evils than the firſt,
Weak, ſickly, full of pains; in ev'ry breath
Railing at life, and yet afraid of death;
Putting things off, with ſage and ſolemn air,
From day to day, without one day to ſpare;
Without enjoyment, covetous of ſelf,
Tireſome to friends, and tireſome to himſelf,
His Faculties impair'd, his temper ſour'd,
His memory of recent things devour'd
E'en with the acting, on his ſhatter'd brain
Tho' the ſtale Regiſters of Youth remain;
From morn to evening babbling forth vain praiſe
Of thoſe rare men, who liv'd in thoſe rare days
When He, the Hero of his tale, was Young,
Dull Repetitions fault'ring on his tongue,

Praiſing grey hairs, ſure mark of Wiſdom's ſway,
E'en whilſt he curſes time which made him grey,
Scoffing at Youth, e'en whilſt he would afford
All, but his Gold, to have his Youth reſtored,
Shall for a moment, from himſelf ſet free,
Lean on his Crutch, and pipe forth Praiſe to Me.

ART. 5. *The Life of Prince* Albert Henry, *of* Brunſwick-Lunenburg, *Brother to the Hereditary Prince*, &c. Curtis. Price 1s. 8vo.

This is a Tranſlation from the *German*, drawn up by a Clergyman of that Country, and probably authentic; but contains nothing intereſting; being only a few private Anecdotes, which, however, are tolerably entertaining.

ART. 6. *Family Pictures. A Novel. In two Vols.* Nicoll. Price 5s. 12mo.

Pretended to be the Memoirs of ſome Perſons of Faſhion in *Worceſterſhire*; but moſt probably the Invention of a Bookſeller's hackney Scribe.

ART. 7. *The Memoirs of Miſs* D'Arville; *or the* Italian *Female Philoſopher. In two Vols.* Fridden. Price 6s. 12mo.

Said to be tranſlated from the *Italian*, and written by Miſs *D'Arville* herſelf, for the Inſtruction of her Daughter: But we will venture to affirm, that no Daughter will receive any Inſtruction from it; for although it may be ſaid to be better than either of the preceding Articles it is, nevertheleſs, a contemptible Performance, and (if *really* tranſlated from the *Italian*) a moſt wretched Tranſlation.

ART. 8. *Maria: The genuine Memoirs of an admired Lady of Rank and Fortune, and ſome of her Friends. In two Vols.* Baldwin. Price 5s. 12mo.

Said to be written by the Author of *Joe Thompſon*, a well known Romance. *Maria* is a moſt bewitching, but unfortunate Girl, that is ever in Diſtreſs; but at length, after miraculouſly eſcaping a Variety of Dangers, and experiencing ſuch Viciſſitudes of Fortune, as ſurely no poor Creature beſides herſelf ever did, ſhe is made happy in the Arms of her generous Lover. The Language is eaſy and ſometimes elegant, and the Characters are well ſupported which renders it tolerably entertaining; but the Story is ridiculous, becauſe it is ill contrived, for a Reader of any Penetration may perceive almoſt the whole Plot by the Time he has read twenty Pages.

ART. 9. *The ancient Right of the* Engliſh *Nation to the* American *Fiſhery; and its various Diminutions; examined and ſtated. With a Map of the Lands, Fiſhing-banks, &c.* Baker. Price 3s. 4to.

Shews, as the Title expreſſes, our ancient and undoubted Right to the *American* Fiſhery from various Authorities, and Points out the Dangers this Nation muſt inevitably be expoſed to by granting the *French* ſo valuable a Part of our Strength.

ART. 10. *Fragments and Anecdotes, proper to be read at the preſent Criſis by every honeſt Engliſhman.* Williams. Price 6d. 8vo.

Theſe Fragments and Anecdotes (which are neatly printed) conſiſt of the 15th Article of Impeachment againſt the Earl of *Oxford* for putting Falſhoods into Queen *Anne*'s Speeches to her Parliament: Mr. *Richard Hampden*'s Speech upon the ſame. The firſt Speech of King *George* I. to his Parliament, in which he declares a Falſity, relative to the Emperor of *Germany*. Count *de Palm*'s (the imperial Miniſter) Memorial, taxing his Majeſty with having declared a Falſity to his Parliament. An Extract from the famous Pamphlet entitled *A Letter to the Right Hon. George Grenville*, on the Manner of making the King's Speech. Mr. *Wilkes*'s two Speeches in the Court of Common Pleas. The 6th Article of Impeachment againſt Lord Chief Juſtice *Scroggs* for granting *general* Warrants againſt Printers and Publiſhers. Part of a Speech of the Earl of *Cheſterfield*'s in the Houſe of Lords. A ſhort Account of Mr. *Murray*'s Caſe. (*See Page* 82.) &c.

ART. 11. *Remonſtrance. A Poem.* Burnet. Price 1s. 4to.

This Remonſtrance is with Mr. *Churchill* on the great Acrimony to be found in ſome of his late Pieces. The Writer confeſſes to admire that great Poet's Genius and Abilities; but inveighs ſtrongly againſt him for the Party-ſpirit which appears throughout his Works. He ſays,

You ſo deteſt a Miniſter of State,
The Land that bred him too muſt ſhare your hate.

By the Author's political Sentiments he ſeems to be the Friend of both Parties; and in his Character of Mr. *Wilkes* are to be found theſe Lines;

" Juſtice howe'er one Action muſt allow,
That wreaths unfading Glory round his brow;
He pluckt a Jewel from the graſp of Pow'r,
Which gives to Liberty one beauty more:
For this he ſtood the Shock of Pow'r alone,
And made the Prize, ſo dearly bought, our own.

Of Lord *Temple* he ſays,

" You praiſe a TEMPLE, let me too commend
The ſteady Patriot, and the faithful Friend,

Not

Not much the worſe for being out of Place,
Superior riſing from a Court's Diſgrace;
Wiſe, candid, lib'ral, Honours which no Frown
Of Courts can alter, Honours all his own.

And of Mr. *Pitt* he adds,

Round him I ſee by Hiſtory engrav'd,
In flaming Characters, A KINGDOM SAV'D,
While from the Glance of his commending Eye
Away Deſpondence and pale Terror fly;
E'en frantic Faction hides her head from Day,
And ſtern Ambition, growling quits her prey;
At Worlds ungrateful, PITT, forbear to grieve,
Rewards are thine which Crowns have not to give.

ART. 12. *The Earl of* Warwick; *Or, the King and Subject. A Tragedy.* Kearſly. 3s. 8vo.

This is a Tranſlation with ſeveral Alterations and Additions from a *French* Play, acted this Winter at *Paris*, called *Le Comte de Warwick*. What the Writer of this Piece intended was, to get it acted at one of the *Engliſh* Theatres. Accordingly Application was made to the Managers of the Theatre Royal in *Drury-Lane*, who gave for Anſwer, "That they had a Tragedy on the ſame Subject, but could not bring it out this Seaſon, they had been ſo engaged." He has therefore now publiſhed it with a Dedication to the *Cotterie* in *Albemarle-ſtreet*. One Thing, however, muſt be obſerved, that conſidering the preſent State of Parties now in *England*, it is not probable, ſuppoſing the Managers of *Drury-Lane* Theatre had accepted it, that they would have obtained a Licenſe, for ſuch an *Application* might be made of the Piece to the Diſadvantage of the Perſons *now* poſſeſſed of Power and this the Writer muſt know and intend, or why does he addreſs it to the *Oppoſition*), that one may reaſonably believe they would not ſuffer that to be acted which might manifeſtly tend to their Prejudice. As to the Play itſelf, it is, upon the whole, but indifferent. The Dialogue in general is deſtitute of all that Beauty of Expreſſion which ſo highly adorns our beſt *Engliſh* Tragedies: And as to the Plot, it is ſo remote from Hiſtory that except the Circumſtance of *Edward*'s Love for *Elizabeth*, there is ſcarcely one in the whole Play that is really founded on Fact.

ART. 13. *An Eſſay on the Neceſſity and Form of a Royal Academy for Painting, Sculpture, and Architecture.* Kearſly. Price 1s. 8vo.

This little Tract was originally publiſhed in 1755, when the Nation being on the Eve of a War, the Author did not find his Sentiments likely to be attended to. But as the War is over he has now republiſhed them with better Hopes. To this Edition he has added a Dedication to the Earl of *Bute*, in which he attacks "the *catch-place* Dedicator of *Elvira*" with great Spirit. To this is ſucceeded a Preface, in which the Writer ſeverely inveighs againſt the Society for the Encouragement of Arts, and ſhews what he calls Inſtances of their Partiality and Ignorance, in diſtributing their Premiums for Paintings; and he goes ſo far as to affirm, that this Society really injures inſtead of encouraging the Arts. As to the *Form* which this Writer Propoſes for *an Academy*, it is, as all Things of this Kind muſt be, in the Nature of a Society, under the Direction of a Preſident, with the Officers of Patron, Treaſurer, Secretary, *&c.* Upon the whole, we muſt obſerve, that this Pamphlet is written with great Spirit, and the Author is doubtleſs a Man of Learning and good Senſe.

ART. 14. *The* NUN: *An Elegy.* Dodſley. Price 6d. 4to.

Very pretty; and ſuch as only a true Genius could both feel and paint. It is a Nun relating her own Caſe to a young Lady who had juſt taken the Veil. In this Manner ſhe firſt accoſts the fair Novice:

With each Perfection dawning on her mind,
All Beauty's Treaſure op'ning on her cheek,
Each flatt'ring Hope ſubdu'd, each Wiſh reſign'd,
Does gay *Ophelia* this lone Manſion ſeek?
Say, gentle Maid, what prompts thee to forſake
The Paths, thy Birth and Fortune ſtrew with flow'rs?
Thro' Nature's Kind endearing Ties to break,
And waſte, in cloiſter'd Walls, thy penſive Hours.

The Queſtions which follow, demanded in the ſame ſweet Melody, are, whether "Some ſacred Impulſe" has induced *Ophelia*, ſo early in Life, to ſequeſter herſelf in a Monaſtry? or whether it is by the Advice of ſome *falſe* Friends that ſhe has taken this Step? if the former, ſhe bids *Ophelia* approach the Shrine with Confidence; but if the latter, warns her to beware of their treacherous Intentions, for the Happineſs and Serenity ſuppoſed to be found in a monaſtic Life is an ill-grounded Opinion, by which Youth is deceived; and relates her own Caſe as an Example.

Three

Three Luſtres ſcarce with haſty Wing were fled,
When I was torn from ev'ry weeping friend,
A thoughtleſs Victim to the Temple led,
And (bluſh ye Parents) by a Father's Hand.
Yet then, what ſolemn Scenes deceiv'd my Choice?
The pealing Organ's animating ſound,
The choral Virgins' captivating Voice,
The blazing Altar, and the prieſts around:
The Train of Youths array'd in pureſt white,
Who ſcatter'd Myrtles as I paſs'd along:
The thouſand Lamps that pour'd a Flood of light,
The Kiſs of Peace from all the veſtal Throng:

She then deſcribes the wretched Situation of a Nun in a Convent.

Here hagard Diſcontent ſtill haunts my View;
The ſombre Genius reigns in ev'ry place:
Arrays each Virtue in the darkeſt hue,
Chills ev'ry pray'r, and cancels ev'ry grace.

In this Manner ſhe goes on, and at Length informs us, that ſhe has been placed there by a cruel Father, partly againſt her own Inclinations, and entirely ſo with reſpect to her Mother. The Concluſion is a pathetic Requeſt of *Ophelia* to attend her Funeral, which, from ſome Symptoms, ſhe apprehends to be not far diſtant.

ART. 15. *A Letter from certain Gentlemen of the Council at* Bengal, *to the Honourable the ſecret Committee for Affairs of the Honourable united Company of Merchants of* England, *trading to the* Eaſt Indies. Becket. Price 1s. 4to.

This Letter is dated from *Fort William* the 11th of *March*, 1762, and ſigned by the following Names, *Eyre*, *Coote*, *P. Amyatt*, *John Carnac*, *W. Ellis*, *S. Batſon*, *H. Verelſt*, and contains the Reaſons of theſe Gentlemen for being againſt the Revolution in Favour of *Meir Coſſin Aly Chan*, which was brought about by Governor *Vanſittart* ſoon after his Arrival in that Province. Theſe Gentlemen give 40 Reaſons for diſapproving or that Revolution; but as theſe Reaſons would ſuffer greatly by any Abridgment, we muſt beg Leave to refer thoſe intereſted to the Pamphlet itſelf.

ART. 16. *The Cloiſter: Or, Memoirs of* Sandfroid *and* Eulalia. *Tranſlated from the French.* Cooke. 3s. 12mo.

A wretched and indecent Novel. The Story is the Hiſtory of a Villain, and the Language is that of a Grubſtreet Garretteer.

ART. 17. *The Chaplain. A Poem.* Ridley. *Price* 1s. 6d. 4to.

This is a ſmart Poem ſeverely attacking the Rev. Chaplain and his Aſſociates. After deſcribing him in a Manner which Nobody can miſtake, the Poet proceeds

Can this gay Fop, this Food for human Mirth,
This Shade, this nothing 'mid the Sons of Earth,
So *good*, he would not for the World be heard
To ſpeak one wanton, one unſeemly Word,
Who would be ſhock'd ſhould e'er his Tongue blaſpheme,
Put ſtirs not, if my Lord inſpires the Theme;
Can *he* in Ribbaldry's immodeſt Strain
To public Eyes laſcivious Scenes explain;
And that his Folly's Mark ſhould ever ſtand,
Stamp them his own, and ſign them with his Hand?
He on the graceleſs Page no Curtain draws,
More richly ſhewn thro' Delicacy's *Gauze*,
Bids luſcious ſweets in luſcious Accents ſhine,
And fans Debauch'ry with his *prurient* Line,
Can *he* 'gainſt Falſhood preach who hugs a Lie,
And loath the Guilt, himſelf he dares to try,
By Patrons fettered and by Faction fir'd,
By a black venal Lawyer's Rage inſpir'd,
(Still doom'd the Tool of State, the Dupe of pow'r,
Tho' threatning Hell wide-open to devour,
Who deals each Vileneſs, each inſidious art,
A callous Head-piece, and a rotten Heart),
Bid ſtreaming Wealth to gilt Corruption roll,
And ſell his own, or buy another's Soul?
Make the foul Miſcreant like himſelf unjuſt,
A Slave to Fraud, a Traytor to his Truſt?

From theſe Lines our Readers will judge of the Spirit of the Piece, and the Author's Genius and Abilities.

ART. 18. *A Diſſection of the* North Briton, *Number* 45, *Paragraph by Paragraph.* Burnet. Price 1s. 6d. 8vo.

ART. 19. *The Conduct of the Adminiſtration in the Proſecution of Mr.* Wilks. Wilkie. Price 6d. 8vo.

A Chronological Memoir *of* Occurrences.

LONDON.

Jan. 27. THIS Day their Royal Highneſſes Prince William Henry and Prince Henry Federick arrived at Leiceſter Houſe from Witham, the Seat of the Earl of Abercorn, where they had been to accompany their royal Siſter.

On

On the 30th the Prince and Princeſs embarked at Harwich. When the Yacht made ſail in which was her royal Highneſs, ſhe was importuned by Lady Suſan Stewart, and ſome other Ladies who went with her, to quit the Deck and partake of ſome Tea or Coffee which were prepared below. No, ſhe ſaid, in *one half Hour* I ſhall be out of Sight of England, and I will gaze at the laſt Cliff of my dear native Country till I can ſee it no longer. On the ſecond of March the Prince and Princeſs landed at Helvoetſluys, and were complimented by the Great Cupbearer, Bigor, on the Part of the Prince of Orange; by M. de Reden, charged by the King of Great Britain and the Regency of Hanover, to conduct them to Lunenbourg; and by M. de Boilwitz, on the Part of the Duke of Brunſwick. Next Day the Prince took the Route by Land, and arrived towards Evening at the Hague. Her Royal Highneſs embarked at the ſame Time on board the Yacht of the Prince of Orange, and arrived the ſame Evening at Delſhaven, and the next Morning at Delſt, where the Hereditary Prince and Duke Lewis of Brunſwick, as well as the Engliſh Ambaſſador, came to meet her. The Equipage of the Prince Stadtholder, with an Eſcort of Body-guards, conducted her Royal Highneſs from Delſt to the Hague, to the Palace of the Prince Stadtholder, called the Old Court, where, on alighting from her Coach, ſhe was received by the Prince Stadtholder, who handed her to her Apartments, where her Royal Highneſs received, ſome Time after, the Compliments of the Foreign Miniſters, and a great Number of Perſons of Diſtinction.

The Prince Stadtholder gave the ſame Day a grand Dinner and Supper, at the ſaid Palace, to their Royal and Serene Highneſſes, who went in the Evening to the French Comedy. On the 15th they again dined and ſupped, and had a Concert at the Old Court. The 6th Duke Lewis of Brunſwick gave to the Hereditary Prince and Princeſs of Brunſwick a ſuperb Dinner, at which were preſent the Prince Stadtholder, the foreign Miniſters, and many other Perſons of Diſtinction of both Sexes. The ſame Day General Yorke gave their Highneſſes a ſplendid Supper, which was followed by a Ball. Her Serene Highneſs was as well as could be expected in the Paſſage, and kept her Bed moſt Part of the Time going over. They left the Hague the 8th Inſtant, on their Way to Germany.

28. Moſt of the foreign Gazettes obſerve, that in all the Subſidy Treaties made by France, the principal Article ſtipulated by them is, that they ſhall be ſupplied with a certain Number of Shipping.

The Court of Directors of the Eaſt-India Company have made Col. Coote a Preſent of a Diamond-hilted Sword, which coſt 700l. as a Teſtimony of their Gratitude for his Services.

Days appointed for holding the Lent Aſſizes.

NORTHERN CIRCUIT.

Lord Manſfield, Mr. Baron Smythe.

City of York, Saturday March 10, at the Guildhall.
Yorkſhire, the ſame Day at the Caſtle.
Lancaſhire, Saturday 24, at the Caſtle of Lancaſter.

NORFOLK CIRCUIT.

Lord Chief Juſtice Pratt, Mr. Juſtice Clive.

Bucks, Monday March 5, at Aleſbury.
Bedfordſhire, Thurſday 8, at Bedford.
Huntingdonſhire, Saturday 10, at Huntingdon.
Cambrigeſhire, Monday 12, at Cambridge.
Norfolk, Thurſday 15, at Thetford.
Suffolk, Monday 19, at St. Edmund's Bury.

MIDLAND CIRCUIT.

Lord Chief Baron Parker, Mr. Baron Perrott.

Rutland, Friday March 23, at Oakham.
Lincolnſhire, Monday 26, at Lincoln.
City of Lincoln, the ſame Day and Place.
Nottinghamſhire, Friday 30, at Nottingham.
Town of Nottingham, Saturday 31, at Nottingham.
Derbyſhire, Tueſday April 3, at Derby.
Leiceſterſhire, Friday 6, at the Caſtle of Leiceſter.
Borough of Leiceſter, Saturday 7, at the Borough.
Northamptonſhire, Tueſday 10, ar Northampton.
City of Coventry, Friday 13, at the City.
Warwickſhire, Saturday 14, at Warwick.

HOME CIRCUIT.

Mr. Juſtice Deniſon, Mr. Juſtice Batburſt.

Hertford, Thurſday March 8, at Hertford.
Eſſex, Monday 12, at Chelmsford.
Kent, Monday 19, at Rocheſter.
Suſſex, Monday 26, at Eaſt-Grinſtead.
Surry, Thurſday 29, at Kingſton upon Thames.

OXFORD CIRCUIT.

Mr. Baron Adams, Mr. Juſtice Wilmot.

Berkſhire, Monday March 5, at Reading.
Oxfordſhire, Wedneſday 7, at Oxford.
Worceſterſhire, Saturday 10, at Worceſter.
City of Worceſter, the ſame Day and Place.
Glouceſterſhire, Wedneſday 14, at Glouceſter.
City of Glouceſter, the ſame Day and Place.
Monmouthſhire, Saturday 17, at Monmouth.
Herefordſhire, Tueſday 20, at Hereford.

Sarop-

Shropſhire, Saturday 24, at Shrewſbury.
Staffordſhire, Thurſday 29, at Stafford.

WESTERN CIRCUIT.

Mr. Juſtice Gould, Mr. Juſtice Yates.

Southampton, Tueſday March 6, at the Caſtle of Wincheſter.
Wilts, Saturday 10, at New Sarum.
Dorſet, Thurſday 15, at Dorcheſter.
Devon, Monday 19, at the Caſtle of Exeter.
Exeter, the ſame Day, at the Guildhall.
Cornwall, Monday 26, at Launceſton.
Somerſet, Saturday 31, at the Caſtle of Taunton.

CHESTER CIRCUIT.

The Hon. John Morton, Eſq; and Taylor White, Eſq;

Montgomeryſhire, Friday March 23, at Pool.
Denbighſhire, Friday 30, at Ruthin.
Flintſhire, Thurſday April 5, at Flint.
Cheſhire, Wedneſday 11, at the Caſtle of Cheſter.

SOUTH-WALES-CIRCUIT.

John Williams, and John Hervey, Eſqs.

Radnorſhire, Wedneſday April 4, at Preſteign.
Breconſhire, Tueſday April 10, at Brecon,
Glamorganſhire, Monday April 16, at Cardiffe.

SHERIFS *appointed by his Majeſty in Council, for the Year* 1764.

Berkſhire, John Walter, of Farley-hill, *Eſq;*
Bedfordſhire, William Pym, of Haſell-hall, *Eſq;*
Buckinghamſhire, William Lloyd, of Beconſfield, *Eſq;*
Cumberland, Henry Elliſon, of Whitehaven, *Eſq;*
Cheſhire, Charles Crewe, of Barthomley, *Eſq;*
Camb. and Hunt. Edward Martin, the younger, of Fenſtanton, *Eſq;*
Cornwall, Hender Mountueven, of Lancarf, *Eſq;*
Devonſhire, William Spicer, of Exeter, *Eſq;*
Dorſetſhire, John Pinney, of Dorcheſter, *Eſq;*
Derbyſhire, Leonard Foſbroke, of Shardeloes, *Eſq;*
Eſſex, John Wilks, of Wendon Lofts, *Eſq;*
Glouceſterſhire, Giles Naſh, of Stonehouſe, *Eſq;*
Hertfordſhire, David Williams, of Sarratt, *Eſq;*
Herefordſhire, Edward Greenly, of Huntingdon, *Eſq;*
Kent, Henry Goodwyn, of Deptford, *Eſq;*
Leiceſterſhire, John Weſton, of Goadby, *Eſq;*
Lincolnſhire, Marmaduke Tomlyn, of Lincoln, *Eſq;*
Monmouthſhire, William Lloyd, of The Hill, *Eſq;*
Northamberland, Chriſtopher Read, of Chipchaſe, *Eſq;*
Northamptonſhire, Sir Booth Williams, *Bart.*
Norfolk, John Davis, of Watlington, *Eſq;*
Nottinghamſhire, Charles Melliſh, of Ratnall, *Eſq;*
Oxfordſhire, Abel Dotting, of Newnham Murren, *Eſq;*
Rutlandſhire, Edward Hunt, of Glaſton, *Eſq;*
Shropſhire, Edward Rogers, of Eaton, *Eſq;*
Somerſetſhire, William Helyar, of Eaſt Coker, *Eſq;*
Staffordſh. William Armet, of Heaton, *Eſq;*
Suffolk, Sir John Blois, of Yoxford, *Bart.*
Southampton, Sir Thomas Worſley, of Appledurcombe in the Iſle of Wight, *Bart.*
Surry, James Morris, of Lambeth, *Eſq;*
Suſſex, John Pay, of Kirdford, *Eſq;*
Warwickſhire, John Knightly, of Offchurch, *Eſq;*
Worceſterſhire, Robert Martin, of Pebworth, *Eſq;*
Wiltſhire, Walter Long, of Wraxhall, *Eſq;*
Yorkſhire, Sir William Foulis, of Ingleby Manor, *Bart.*

SOUTH WALES.

Brecon, Tho. Bowen, of Tyle Crwn, *Eſq;*
Carmarthen, Woodford Rice, of Gellyvergan, *Eſq;*
Cardigan, Thomas Jones, of Noyadd, *Eſq;*
Glamorgan, Abraham Williams, of Cathays, *Eſq;*
Pembroke, William Ford, of Stone-hall, *Eſq;*
Radnor, Thomas Legge, of Preſteigne, *Eſq;*

NORTH WALES.

Angleſey, William Lewis, of Lanvihangel, *Eſq;*
Carnarvon, John Griffith, of Trygarn, *Eſq;*
Denbigh, William Dymocke, of Wrexham, *Eſq;*
Flint, Richard Parry Price, of Brynypiece, *Eſq;*
Merioneth, William Lloyd, of Rhevodog, *Eſq;*
Montgomery, Arthur Blainey, of *Greggining*, *Eſq;*

Laſt Night Edward Dillon, a Paymaſter-Serjeant in the Light Horſe, was committed to the New Goal, Southwark, for ſhooting at Jane Pearce, with intent to kill her. The Story is thus related: Dillon having courted the Chamber-maid at the Bull-Inn, at Kingſton upon Thames, ſhe conſented to have him; upon which a Licence was taken out, the Ring bought, and the Wedding to have been on Sunday; but on ſome Difference between them, the Maid burnt the Licence, and would not conſent to it; on which he came into the Kitchen on Sunday Morning, and fired a Piſtol at her, and the Ball hitting againſt her Stays behind, made only a Scratch on her Side; on which ſhe flung her Apron over her Head, and run towards the Fire, crying out, "Lord, don't ſhoot me;" when he diſcharged another Piſtol at her, which

which went into her Back behind between her Stays, and it is thought ſhe will not recover; on this he ran up Stairs into his Room, bolted himſelf in, reloaded his Piſtols, and ſwore he would kill the firſt Man who attempted to come in: An Officer was then ſent for, who came with a File of Soldiers; and ordered him to ſurrender; but the other refuſed, and ſtill declared his Reſolution of killing the firſt Man who ſhould attempt coming in; but the Officer being very reſolute, declared, if that was his Reſolution, he would force the Door, and ſhoot him through the Head immediately, or be ſhot himſelf. This brave Behaviour of the Officer ſo intimidated the Serjeant, that he opened the Door, laid down his Arms and ſurrendered himſelf Priſoner.

Feb. 2. The Freedom of the Corporation of Dublin has been preſented to the Hon. Lieut. Col. Howe, for his Behaviour in the Conqueſt of Canada; and alſo to the Hon. Sir James Caldwell, for his raiſing a Regiment of Light Horſe, for the Defence of his Country, at his own Expence, in 1759; and the Commons alſo ordered their Thanks to Lord C. J. Pratt in the following Words.

"*Chriſtmas Aſſembly, 20th Jan.* 1764.

"Ordered, that the Thanks of the Sheriffs and Commons of this City in Common Council aſſembled, be preſented to the Right Hon. Lord Chief Juſtice Pratt, for the diſtinguiſhed Zeal and Loyalty which he has ſhewn in aſſerting and maintaining the Rights and Liberties of the Subject, in the high Station which he now fills with remarkable Dignity; and for his particular Services to this Kingdom in the Office of Attorney General.

"Signed by order,

JAMES GODDARD, Clerk of the Commons."

A curious repeating Watch, in a Ring, making for his Majeſty by Mr. Arnold, Devereux-court, Temple-bar. This extraordinary Piece of Mechaniſm is leſs in Circumference than a Silver Two-pence; repeats the Hours, Quarters, and half Quarters, and runs upon Diamonds; the Horizontal Wheel and Pinions are equal in Weight only to the 16th Part of a Grain of Gold, and the Pendulum and Spring equal in Weight only to the 200th Part of a Grain.

3. Advice came from North America, that the Indians, who for ſome Time paſt had beſieged Detroit, had made Peace with the Governor, and reſtored the Engliſh Priſoners. But a large Party of them were gone with great Quantities of Beaver, to purchaſe Ammunition of the French Governor at New Orleans.

Extract of a Letter from St. Neot's in Huntingdonſhire, Jan. 30.

"On the 18th of January, at 36 Minutes paſt Five o'Clock in the Evening, was diſcovered by E. Webſter, an eminent Aſtronomer at this Place, a ſurprizing Meteor, of a pale red, at the Height of 6 Degrees 27 Minutes to the S. W. above the Horizon, being in Length 3 Deg. 30 Min. and in Breadth 10 Min. This Vapour was in Contact with a condenſed Cloud, but the greateſt Part of the Sky was very clear and ſerene, and the Moon near its Full, being 12 Deg. 20 Min. above the Horizon, 24 Deg. 6 Min. in Cancer, and 4 Deg. 46 Min. in N. Declination. This Meteor, in 1 Min. 34 Sec. appeared in a Semicircle oppoſite to the Moon, and by the Refraction of its Rays, was a bright Rainbow. But what is moſt ſurprizing is, that it is the firſt Rainbow that ever was known to appear after Sun-ſet. Such a Phænomenon may perhaps be a token of bad Weather, which we have had here in Abundance; and it is obſervable, that the Seaſons have been long wet, and dry for theſe ſeveral Years paſt. If this Globe of Earth were one plain watery Surface, and had the Sun, as now, his apparent diurnal Motion round it, a certain Quantity of Vapours would then be daily raiſed, and retained by the Atmoſphere. Theſe Vapours, when the Air came to be condenſed on Night, would as conſtantly ſubſide and ſink in Dews; nor in this Caſe could any Diverſity of Weather be expected, other than periodically, and every Year alike.

9. Wedneſday, at a numerous Meeting of the Society of Arts, the Sum of 150l. was granted to Capt. Blake, towards his farther proſecuting the Scheme for reducing the Price of Fiſh.

The Lapwing Packet arrived at Falmouth, expreſs from the Eaſt-Indies, and brought the diſagreeable News, that on the 23d of June Mr. Ellis, the Chief of the Company's Factory at Patna, thought fit to put himſelf at the Head of a large Body of the Company's Troops, and upon what Provocation does not appear, to attack the City, which was carried with great Slaughter of the Inhabitants, and given up to Plunder. The Governor making his Eſcape, joined a Party of the Nabob's Forces, who were marching to his Relief, and hearing of the Diſorder into which the Engliſh in the Town were fallen, attacked, and entered it Sword in Hand, ſparing none who were found in Arms. Ellis, with 3 or 400 Men, Europeans and Seapoys, eſcaped, and croſſed the River. — The very Day this Misfortune happened, Mr. Amyat, who had been deputed from the Council at Calcutta, to treat with the Nabob, and to diſpoſe him

to comply with the Demands they had thought fit to make on him, and who had attended the Nabob at Mongeer for that Purpoſe, accompanied with ſeveral other Gentlemen of the Factory, not ſucceeding in the Buſineſs of his Embaſſy, took his Leave of the Nabob, having received the neceſſary Paſſports to return to Calcutta, and ſet out in Boats with his Party, conſiſting of Meſſ. Amphlett, Wollaſton, Crooke, and Hutchinſon, and the Lieutenants Jones, Gordon, and Cooper, with two Companies of Seapoys, and twenty European Horſemen. Soon after their Departure, News arriving at Mongeer of what had paſſed at Patna, this unfortunate Party were followed by ſome of the Nabob's Troops, and, as is ſuppoſed, by his Orders; they were overtaken on the 3d of July near Muxadvavad, and it is feared all were cut to Pieces except Amphlett, who was carried bound to the Nabob. Upon Advice of theſe Incidents at Calcutta, the Council took upon them to ſet up Meer Jaffir, the Nabob formerly depoſed, the Company's whole Force was ordered to take the Field, under the Command of Major Adams, who was advanced as far as Cutwa, when the laſt Advices left him, and there was little Doubt of Succeſs

A full Account of the Diſputes which this Event occaſioned among the Proprietors of India Stock ſhall be given in our next.

10. Tueſday and Wedneſday ſeveral poor Priſoners were diſcharged from the Marſhalſea, by Virtue of a charitable Donation of 500l. left by the Princeſs of Brunſwick before ſhe ſet out for Germany: She likewiſe left 500l. for diſcharging the Priſoners of Whitechapel Jail.

11. By the Death of Sir Jacob Gerrard Downing, Bart. without Male Iſſue, an Eſtate of 6000l. per An. devolves upon the Univerſity of Cambridge, for building a College to be called Downing College.

Yeſterday his Majeſty conferred the Honour of Knighthood on Capt. John Lindſay, of the Tartar Man of War, as a Reward for his Services in the Siege of the Havannah. At the ſame Time, he kiſſed his Majeſty's Hand on his Departure for Florida.

13. This Day Philip Thickneſs, Eſq; Lieutenant Governor of Languard Fort, who was convicted at Bury Aſſizes of writing and publiſhing a Libel on the Right Hon. Lord Orwell, received Sentence, in the Court of King's Bench, to be impriſoned three Months, to pay a fine of 100l. and to find Security for his good Behaviour for 7 Years.

15. This Morning James Anderſon, for robbing two Women in a Field near Hampſtead, and Thomas Thompſon for a Burglary, were executed at Tyburn.——John Prince, who was to have ſuffered along with them, was reſpited laſt Night for three Weeks.

18. This Morning the Houſe of Commons broke up at half an Hour paſt ſix o'Clock, 455 Members were preſent. On Monday the 13th the Houſe ſat from 12 o'Clock at Noon, till 8 o'Clock on Tueſday Morning.

20. *Copy of a Letter from Paris, dated Feb. 5, 1764.*

" Sir,

" I took the Liberty of tranſmitting to you, on the 11th of laſt Month, the original of a Certificate which was entirely the Hand-writing of Monſieur Ninnin, one of the King's Phyſicians, and ſigned by that Gentleman, as well as by Monſieur Duſouart, Surgeon of the Army. It was not imagined here, that any thing more was neceſſary among Gentlemen. If the Houſe, or any ſingle Member, had deſired a notarial Act of the Authenticity of the Certificate, I ſhould ſooner have troubled you with the incloſed; which is atteſted by our Embaſſador at this Court: it now becomes my Honour to requeſt that it may be laid before the Houſe.

I do not mean, Sir, to miſpend my Time in making any Remarks on the late proceedings; they are ſo obvious, that they will immediately occur to every Man, who is not loſt to the Principles of Virtue, and dead to the feelings of Honour and Humanity. I am not able, at preſent, to ſay much; but this I will add, that I am ſure my Countrymen of the preſent Age, and the faithful Hiſtorian's Page, will do juſtice to the uprightneſs of my Intentions, to my ardent Love of the Conſtitution of our happy Iſland, and to the honeſt Efforts I have made in the Cauſe of Liberty. I rejoice that I have been the Inſtrument, in the Hand of Providence, to obtain very important legal Deciſions in Favour of my Fellow Subjects.

I am, with becoming Regard, Sir,
Your very humble Servant,
JOHN WILKES.

To the Right Hon. &c. &c.

This Day, the 5th of February, 1764, there appeared before me Monſieur de la Rue, and made Oath, that he was a Notary Publick; that he had ſigned the Certificate abovementioned; that Monſieur Robineau was alſo a Notary Publick, and had ſigned the ſame. In Witneſs whereof I have hereunto affixed my Hand and Seal,

HERTFORD. (L. S.)

The following are the remarkable Words

round

round the Head of a Medal of Colonel John Lilborne, who was tried for a Libel and *acquitted*, the 26th of October 1649, viz.

"John Lilborne ſaved by the Power of "the Lord, and the Integrity of his Jury, "who are *Judges* of *Law* as well as *Fact*."

On the Reverſe are the Names of his honeſt Jurymen.

21. *At a* Court of Common Council *at Guildhall, London, Feb.* 21, 1764.

Reſolved, That the Thanks of this Court be preſented to Sir Robert Ladbroke, Knt. Sir Richard Glynn, Bart. William Beckford, Eſq; and the Hon. Thomas Harley, Eſq; the Repreſentatives of this City, for their Zealous and ſpirited Endeavours to aſſert the Rights and Liberties of the Subject, by their laudable Attempt to obtain a ſeaſonable and parliamentary Declaration, *That a general Warrant for apprehending and ſeizing the Authors, Printers, and Publiſhers of a ſeditious Libel, together with their Papers, is not warranted by Law*; and to expreſs to them our warmeſt Exhortations, that they ſteadily perſevere in their Duty to the Crown, and uſe their utmoſt Endeavours to ſecure the Houſes, Papers, and Perſons of the Subject from arbitrary and illegal Violations.

Reſolved, That this Reſolution be fairly tranſcribed, ſigned by the Town Clerk, and by him be delivered to the four Repreſentatives of this City.

Reſolved, That "As the Independency "and Uprightneſs of Judges is eſſential to "to the impartial Adminiſtration of Juſ-"tice, and one of the beſt Securities to the "Rights and Liberties of the Subject," this Court, in Manifeſtation of the juſt Senſe we entertain of the inflexible Firmneſs and Integrity of the Right Hon. Sir Charles Pratt, Lord Chief Juſtice of his Majeſty's Court of Common Pleas, doth direct that the Freedom of this City be preſented to his Lordſhip, and that he be deſired to ſit for his Picture, to be placed in Guildhall, in Gratitude for his honeſt and deliberate Deciſion upon the Validity of a Warrant, which had been frequently produced to, and, ſo far as appears to this Court, never been debated in the Court of King's Bench; by which he hath eminently diſtinguiſhed his Duty to the King, his Juſtice to the Subject, and his Knowledge of the Law.

Reſolved, That the above Reſolution be fairly tranſcribed, and delivered by the Town Clerk to his Lordſhip.

Reſolved, That the ſaid Freedom be preſented to his Lordſhip by the Chamberlain in a Gold Box.

This Morning, a little after nine o'Clock, came on before Lord Chief Juſtice Manſfield, in the Court of King's Bench, Weſtminſter, the Trial of John Wilkes, Eſq; as the ſuppoſed Re-publiſher of N°. 45, of the North Briton; with Notes; the Court was opened in a very learned Manner, by Sir Fletcher Norton, Attorney-General, who obſerved, that he had received certain Information that inflammatory Papers had been ſent to the Gentlemen of the Jury, in Favour of the Defendant, tending to Bias and Prejudice their Minds. Lord Mansfield made ſome Remarks on the heinous Nature of ſuch a Proceeding, if true, and declared, if the offending Party could be diſcovered, he ſhould be puniſhed in the moſt exemplary Manner: A Queſtion was then put to the Jury relative to the above, when the Foreman acknowledged the Fact; and at the ſame Time, very gravely putting his Hand into his Pocket, produced a Paper on the other Side, which he obſerved was equally inflammatory, which put the whole Court into a Smile. After a Trial of about eight Hours, the Jury brought him in guilty. Immediately after the above Trial, came on that of the Eſſay on Woman: in which he was alſo caſt. Sentence on both Verdicts is to be given the firſt Day of next Term. The following are the Names of the Gentlemen of the Jury on Mr. Wilkes's Trial for re-publiſhing the North Briton, N°. 45. viz. George Chardin, of Greek-ſtreet, Eſq; Charles Boucher, of Edmonton, Eſq; Winthorp Baldwin, of Hampton, Eſq; Edward Lovibond, of ditto, Eſq; Peter Lekeux, of Church ſtreet, Eſq; Liſter Selman, of Old Ford, Eſq; John Smart, of Limehouſe-Hole, Eſq; George Stevens, of Poplar, Eſq; Linnel Lee, of Brooke-ſtreet, Eſq; Hugh Roberts, of Old Gravel Lane, Eſq; George Garret, of Lemon-ſtreet, Eſq; Samuel Hawkins, of ditto, Eſq; And for the Eſſay on Woman, Lawrence Richardſon, of Old-ſtreet, Eſq; Sir Richard Bettenſon, of Queen-ſquare, Bart. Robert Thomas of Highgate, Eſq; John Cox, of Baynbrigg-ſtreet, Eſq; Philip Dyot, of Dyot-ſtreet, Eſq; Stephen Clarke, of Hart-ſtreet, Eſq; Geo. Chandler, of Great Ruſſel ſtreet, Eſq; John Chace of Great Ruſſel-ſtreet, Eſq; John Weſton, of Hatton Garden, Eſq; Edw. Davenhill, of Hatton Garden, Eſq; Charles Carey, of Henrietta-ſtreet, Eſq; Thomas Smith, of Maſon Court, Eſq; The Council for the Crown were, Mr. Attorney General, Mr. Moreton, Mr. Clayton, and Mr. Wallis. For the Defendant, Mr. Serjeant Glynn, Mr. Recorder Eyre, Mr. Stowe, Mr. Dunning, and Mr. Gardiner. The Jury were out an Hour and three Quarters upon the firſt Trial of Mr. Wilkes, for printing the North

North Britons; and about half an Hour on the other.

27. This Day, at Noon, an infamous and ſeditious Libel, entitled "Droit le Roy, or the Rights and Prerogatives of the Crown of Great Britain," was burnt at the Royal Exchange by the Hands of the common Hangman, purſuant to an Order of the Houſe of Lords. According to the Doctrine of this infamous Book, the King of England was the moſt abſolute Monarch upon the Face of the Earth; equal to God himſelf; and the People of England, the moſt perfect Slaves.

28. The City of London only, excluſive of Weſtminſter or the Suburbs, is annually charged and pays conſiderably more than double the Sum, that the whole Kingdom of Scotland is charged, to the Land Tax, as appears by the following Charge for the preſent Year, viz.

	l.	*s.*	*d.*
The City of London —	123,399	6	7
The Kingdom of Scotland	47,954	1	2
Ballanced by the City of London —	75,445	5	5

FOREIGN AFFAIRS.

THE Affairs of the Continent this Month are neither material nor intereſting. The King of Pruſſia, ever attentive to the general Good of his People, has forbid all expenſive Ceremonies at Burials of Perſons of all Ranks: It has been often obſeved, that the Germans expend ſo much on theſe Occaſions, that the Family is much pinched for a conſiderable Time after. The late heavy Rains have done incredible Damage in all the low Parts of Germany, Heſſe, Holland, &c. About the Beginning of this Month, Gen. Yorke had a Conference with the Deputies of Holland, wherein he ſignified to them, that his Court was informed, that ſome Dutch Merchants had engaged to ſupply France with Timber for Ship building, and alſo Cordage; that this Conduct was contrary to the Treaty of Commerce and Friendſhip which has ſo long ſubſiſted between the two Nations, and therefore he hoped a Stop would be put to it. In France they are fitting out Ships with all poſſible Diligence.

B——KR——TS.

John Dean, of Thames-ſtreet, London, Cheeſemonger.—Thomas Collard, of Wells, Innkeeper.—Henry Morris, of Chowebent, Lancaſhire, Chapman.—Thomas Gueſt, of Broſely, Salop, Victualler.—Stephen Sargent, of Rotherhith, Mariner.—John Chriſtian, of Gracechurch-ſtreet, Goldſmith.—Joſeph Stell, of Keighly in Yorkſhire, Dealer and Chapman.—Thomas Naylor, of London, and James Walker, late of New-York, but now of London, Merchants and Partners.—Richard Simpole, of Wolverhampton, Grocer.—Sarah Backhouſe, of Lancaſter, Linen-draper.—Thomas Adderly, of Bethnalgreen, Oilman.—Matthew Ryder, of Friday-ſtreet Grocer.—William Rowton, of Thames ſtreet, Victualler—Lewis Vernani, of London, Merchant.—Richard Merry Henning, of Wanſtead, Apothecary.—John Shilton, jun. of Derby, Dealer—Alexander Smith, of Wellcourt, Queen-ſtreet, Merchant.—John Goodchild, of Charing Croſs, Linen-draper.—Iſaac Coſſart, of Cateaton ſtreet, Merchant.—James Taylor, of Fenchurch Street, Merchant,—George Cowper, of Liverpool, Wine-merchant.—Robert Pearce, of Sherborne Lane, Taylor.—John Logan, and David Logan, of Angel-ſtreet, Copartners and Merchants.—Richard Hodgſon, of Clement's lane, Cannon ſtreet, Haberdaſher of Hats.—William Cheſlyn, ſen. and jun. of Whitechapel, Ironmongers.—James Duncan, of Long-alley, Shoreditch, Dyer.—Michael Suffin, of St. Margaret's Weſtminſter, Carpenter.—James Wheeler, of Snow hill, Vintner.—Archibald Campbell Fraſer, and George Wharton, of London, Merchants and Partners.—Gabriel Griffith, at the Poſt Office in Whitehaven, Merchant.—Benedictus Hendricks, of London, Merchant.—Joſeph Sewel, of Whitechapel, Livery-ſtable-keeper.—James Thomas, of Union court, Old Broad-ſtreet, Wine-merchant.—James Hetherington, of Bow-lane, Merchant.—John Dore, of Bloomſbury, Grocer.—William James, and Nathanial Poyntell, of Lombard-ſtreet, Copartners and Stationers.—Iſaac Mauran, of Knaves acre, Colourman.—William Sydebotham, and Jonathan Radcliffe, jun. of Liverpool, Merchants.—Richard Preſton, of Skipton, Yorkſhire, Tallowchandler.—James Hodges, of Mile End, Merchant.—John Morecock, and Thomas Pittney, of Little Morefields, Watch-makers and Partners.—Matthew Dwier, of Portſmouth, Linen-draper.—Benjamin Weatherby, of St. Catherine's, Merchant.—John Eames, of Briſtol, Haberdaſher.—John Coram, of Briſtol, Ironmonger.—Samuel Seccombe, of Weſtſmithfield, Merchant.—John Stanley, of Nottingham, Grocer.—Samuel Becconſall, jun. of Liverpool, Merchant.

*** *Births, Marriages, Deaths, Appointments, and Promotions in our next.*

The GENERAL MAGAZINE,

For *MARCH*, 1764.

To the AUTHORS.

By giving the following Eſſay a Place in your GENERAL MAGAZINE *you will oblige many of your Subſcribers, and in particular*

Your humble Servant,
W. P.

NOTHING is a greater indication of luxury, the fore runner of poverty, than the degeneracy of the polite arts into uſeleſs oſtentation. The poets, painters, and ſculptors have of late almoſt forgot what gave riſe to, and ought to be the end of their labours. Thoſe noble deſigns in which *Athens* gloried more than in all her military exploits, are now little regarded; and thoſe noble ſervants of virtue, the Arts, which formerly gave inſtruction not only to the young and unexperienced, but to the old and learned, are moſtly ſlighted, and often proſtituted to adorn vice, and flatter human vanity. But to lay aſide the ſeverity of the moraliſt, and talk to the profeſſors of what, they will think, concerns them moſt. I am fully convinced that nothing would ſo much contribute to their fame and fortune, and to make them complete maſters, as an attachment to virtue, and the uſes of life; and an emulation to form their deſigns from the models of thoſe ancient artiſts, whoſe works have been delivered down to us with the greateſt applauſe, and will be to all poſterity, as long as truth is eſteemed the criterion of perfection.

Suppoſe any one of the geniuſes of the preſent age, whether poet, painter, or ſtatuary, inſtead of following the wild lure of his own imagination, or the whims of modern originals, ſhould modeſtly content himſelf to make *Prodicus*'s judgment of *Hercules* in *Xenophon*'s *Memorabilia*, the *perfect beauty* of *Lucian*, or *the mythological picture of human life* written by *Cebes*, the ſubject of his imitation; I dare anſwer for it he would preſently excel his brethren, and verify this obſervation, that the moſt faithful diſciples of nature are always the greateſt maſters of art. This juſtice, however, I muſt do my countrymen, to obſerve that there are ſtill ſeveral among us, who, in ſpite of publick depravity, retain a virtuous love for the arts, and make *uſe* the end of their endeavours. A friend of mine, who is an admirer of the three pieces above-mentioned, took me to ſee a collection of pictures, which were moſt of them taken from the deſigns of thoſe celebrated Writers. Among the reſt I was particularly pleaſed with four, which exceeded any modern performances, I ever ſaw, in contrivance and execution. The ſubjects were *infancy*, *youth*, *manhood*, and *age*, which were repreſented in the following manner. The prin-

cipal figure of the firſt piece was a naked child coming into a wilderneſs, ſupported by *innocence* and *wonder*. At the entrance the *fancies* of various kinds ſtood ready to receive it, who were conducted, for the moſt part, by *impoſture*, *ignorance*, and *error*; ſome few indeed by *reaſon* and *truth*. Thoſe, belonging to the former, were the miniſters of *miſery*; thoſe, to the latter, of *happineſs*. Both parties ſeemed very deſirous to allure the *new comer* to their reſpective dwellings, and doubt and pleaſure were blended together in the infant's countenance.—The ſecond piece was compoſed of a group not unlike the firſt. A young man was repreſented walking in a beautiful garden, where all the trees in full bloſſom were arranged in the moſt natural manner; the *loves*, the *graces*, and *pleaſures* were courting his embrace, whoſe careſſes he returned with mutual ardor. Beneath the feet of theſe was a ſerpent crawling out from under a border of flowers; and, at a little diſtance from thence, three or four *cupids* binding *reaſon* in chains. *Venus* appeared above, deſcending in a chariot drawn by doves, with her *Idalian* ſon upon her lap, and *indolence* amidſt her court of infant vices lolling on a couch below. *Manhood*, the ſubject of the third piece, was characterized by a ſedate perſon in a vine-yard at the time of vintage. He was leaning in a thoughtful poſture, againſt a large olive-tree, whoſe fruit was falling round him. *Ambition* ſtood on one ſide, pointing to the temple of *glory*, and *care* on the other ſide, with a wrinkled forehead, looking at *neceſſity*. To theſe the *arts* and *ſciences* were offering their aſſiſtance, and the *laws* protecting them, with their written tables in one hand, and the ſword of *juſtice* in the other. But amidſt all this group, the figures that looked the moſt amiable were *friendſhip*, *conjugal love*, and *parental affection*. To give theſe the moſt heavenly ſweetneſs, the painter had exerted his utmoſt ſkill; and to theſe the principal image ſeemed moſt attentive, as if he regarded the reſt only as ſubſervient to them.—The fourth piece remains to be deſcribed. There was an old man ſtanding in a leafleſs grove, with his unactive arms folded together, as if he was fixed in the deepeſt meditation. His beard was long and white, and his garments like thoſe worn by the *Athenian* ſages. *Reflection* and *experience* came behind him, and their offſpring *foreſight* and *precaution* went before. *Reaſon*, the great queen of the intellectual train, appeared in a triumphal car, with the *paſſions* chained to the wheels, and *opinion* waiting on her look: at ſome diſtance *hope* and *peace* were ready to conduct the ſage to the temple of death, who ſate upon a throne with *Time*, his train of *hours* and *days* attending round, and ſeemed to invite the approaching gueſt with a friendly ſmile of ſalutation, and not to deter him with the looks of horror, in which the guilty are accuſtomed to paint him.—In theſe four pictures, the ſeaſons of life, the *paſſions*, &c. are moſt beautifully perſonified, and may ſerve as a ſpecimen of what was eſteemed ingenious and beautiful among the ancients.

But

But beſides theſe, I was not a little delighted with another ſingle piece in the ſame collection. It was the wreck of a large ſhip on a rock; the veſſel is ſuppoſed to have juſt bulged, the mariners are all in the utmoſt confuſion and deſpair, and in the midſt of them upon the deck ſtands a beautiful young woman looking down upon the waves below, where an old man is expiring with a dead infant in his arms: the one is ſuppoſed to be her father, the other her child: the lively anguiſh, mixed with the moſt tender looks of parental and filial love, which ſhe expreſſes, never fails to raiſe in the ſpectator of this maſter-piece of art, the moſt heart-ennobling pity, and gives us a ſilent leſſon of duty and affection.—— Such ſubjects as theſe ought to employ the time of every artiſt, where natural and moral beauty would be again united as they were of old; for whenever a good taſte prevails in the one, an inſeparable connection will transfer it into the other; but as long as *ſuperſtition* uſes *art* like a magician's wand, to delude the multitude with her fairy creations, and *luxury* allures her to rebel againſt *virtue*, the productions muſt neceſſarily be monſtrous; diſguſt every undiſtempered mind; and only ſuit that incongruity from whence they ſprung, of *prieſtcraft* and *licentiouſneſs*.

* *

An account of ſeveral rivers of Normandy, *and other parts of* France, *which looſe themſelves and afterwards appear again. From the* Hiſtoire de l'Academie Royal des Sciences, *for* 1758, *juſt publiſhed at* Paris.

IT is very ſurprizing, if we reflect upon it, that a river in its courſe which is often very extenſive, ſhould not meet with ſpongious ſoils to ſwallow up its waters, or gulphs in which they are loſt: nevertheleſs, as there has been hitherto known but a ſmall number of rivers whoſe waters thus diſappear, this phænomenon has been accounted very extraordinary both by the ancients and moderns. *Pliny* ſpeaks of it with an energy familiar to him, and *Seneca* mentions it in his *Quæſtiones Naturales:* he even diſtinguiſhes theſe rivers into two ſorts, thoſe that are loſt by Degrees, and others which are ſwallowed up all at once, or ingulphed: which would make one believe that the ancients had collected ſome obſervations concerning them.

But leaving apart what may be wonderful in theſe rivers, it may be aſked, how they are loſt? From what particular qualities of the ſoil over which they flow, and from what ſituation of the places through which they paſs, does this phænomenon ariſe? Upon this head we find but little light in authors, and concerning which we might be informed, if the obſervations of the ancients had reached us.

M. Guettard has undertaken to remove part of this obſcurity, by deſcribing what he has obſerved in ſeveral rivers of *Normandy*, which are loſt and afterwards appear again: theſe are ſix in number, viz. the *Rille*, the *Ithon*, the *Aure*, the river of *Sap-André*, and the *Drôme*.

The three firſt diſappear gradually, and then come in ſight again;

the fourth looſes itſelf entirely by degrees, but afterwards reappears; the fifth looſes ſome of its water in its courſe, and ends by precipitating itſelf into a cavity, from whence it is never ſeen to riſe again.

What ſeems to occaſion the loſs of the *Rille*, the *Ithon*, and the *Aure*, is the nature of the ſoil through which they paſs. *M. Guettard* has obſerved that it is in general porous, and compoſed of a thick ſand the grains of which are not well compacted together; it ſinks ſuddenly down by its own weight in ſome places, and there forms great holes; and when the water overflows the meadows, it frequently makes many cavities in ſeveral parts of them. If we therefore ſuppoſe inequalities in the channel of theſe rivers, and that there are certain places in which the water ſtagnates longer than in others, it muſt there dilute the ground, if we may uſe that expreſſion; and having carried away the parts which united the grains of ſand together, thoſe grains will become afterwards no other than a kind of ſieve, through which the waters will filtrate themſelves, provided nevertheleſs that they find paſſage under ground through which they may run. This conjecture appears to be ſo well founded, that each of theſe three rivers looſes itſelf in nearly the ſame manner, that is to ſay, through cavities which the people of the country call *betoirs*, and which ſwallow up more or leſs water according to their largeneſs. *M. Guettard* who has carefully examined them, remarks that theſe *betoirs* are holes in the forms of a tunnel whoſe diameter and aperture is at leaſt two feet, and ſometimes exceeds eleven; and whoſe depth varies in like manner from one and two feet to five, ſix, and even twenty. The water generally gets into theſe cavities, when the river is not very high, making a gugling noiſe and turning round in an eddy. A proof that waters are there filtered and abſorbed among the grains of this ſharp diluted ſand, is that frequently in a *betoir* two or three feet deep, and through which a great deal of water is loſt, one cannot thruſt a ſtick farther than the ſurface of its bottom. Wherefore as theſe *betoirs* ſo frequently occur in the bed and banks of the *Rille*, the *Ithon*, and the *Aure*, it is not ſurprizing that theſe rivers ſhould be thus loſt. The *Rille* during the ſummer ſeaſon looſes almoſt all its water in the ſpace of two ſhort leagues, the *Ithon* does very near the ſame; but *M. Guettard* obſerves ſomething curious concerning this river, to wit, that formerly it was not loſt, but kept its courſe without any interruption, as appears by the hiſtory of the country: very likely, the mud which had been collected together in ſeveral parts of its channel, might have occaſioned the waters remaining in others, and thereby have cauſed many *betoirs*. This is the more likely, as the mud having been collected together in the bed of the river *Aure*, it appears in conſequence thereof, the cavities were greatly increaſed, which makes it looſe itſelf much ſooner than formerly; however it has been reſolved to cleanſe its channel to remedy this inconvenience. Beſides, poſſibly an earth-quake happening in the country might have cauſed ſeveral ſubterraneous

canals,

canals, through which the water of the *Ithon* (which before very likely could not paſs through the ſoil beneath its bed) has forced its way. In effect it appears that a ſoil's being porous is not ſufficient to cauſe the loſs of a river; for if it were, then to do ſo it would occaſion many fens round about, nor would it renew its courſe after having diſappeared a certain time: it muſt beſides, as we have before ſaid, find ways under ground through which it may take its courſe. *M. Guettard* ſeems alſo much inclined to believe that there are in theſe parts ſubterraneous cavities, through which the waters may flow; and in conſequence of this he reports a number of facts all tending to prove the truth of it, or at leaſt to prove that there muſt be hollow quarries ſerving for ſtrainers to theſe waters. Upon which occaſion he goes into a diſcuſſion of this queſtion, are there any ſubterraneous rivers, and is the prepoſſeſſion of ſome perſons in favour of this particular well founded? He makes appear by ſeveral inſtances which he quotes, and by many reaſons which he alledges, that there are at leaſt very great preſumptions in favour of this opinion. We are too apt not to look beyond the exterior of things: we feel reſiſtance upon the ſurface of the earth; when we go deep we often find it compact. It is therefore hard for us to imagine that it can contain ſubterraneous cavities ſufficient to form channels for hidden rivers, or for any conſiderable body of water; in a word that it can contain vaſt caverns: and yet every thing ſeems to indicate the contrary. A fact that is obſerved in the *betoirs* of the rivers concerning which we have ſpoke, and particularly of the *Rille*, proves in ſome meaſure that there are conſiderable lakes of water in the mountains which limit its courſe: this fact is, that in winter the greateſt part of their *betoirs* become ſprings which ſupply anew the river's channel with as much water as they had abſorbed from it during the ſummer. Now from whence can that water come, unleſs from the reſervoirs or lakes that are incloſed in the mountains, which being lower than the river in ſummer, abſorb its water, and being higher in winter by occaſion of the rain they receive, ſend it back again in their turn?

M. Guettard ſtrengthens this conjecture by ſeveral inſtances that render it very probable: he remarks at the ſame time, that this alternate effect of the *betoirs* ſwallowing up the water and reſtoring it again, cauſes perhaps an invincible obſtacle to the reſtraining of the water within the channel of the river. It has indeed been ſeveral times attempted to ſtop thoſe cavities, but the water returns with ſuch violence in winter that it generally carries away the materials with which they were ſtopped.

The river of *Sap-André* is loſt in part, as we have before ſaid, in the ſame manner as the *Ithon* and the *Rille*; but there is ſomething more remarkable in it than in thoſe rivers, to wit; that at the extremity of its courſe, when there is no perceptible cavity, it, as it were, is ingulphed, but without any fall: the water paſſes between the pebbles, and it is impoſſible to force a ſtick into that place

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any farther than into the other *betoirs* of which we have ſpoke. What makes this river take that ſubterraneous direction, is an impediment which its ſtream meets with in that place: it is there ſtopped by a riſing ground ſix or ſeven feet high, whoſe bottom it has very likely undermined, to gain a free paſſage, not having been able to make its way over it. At ſome diſtance from thence it appears again; but in winter, as there is a greater quantity of water, it paſſes over that eminence, and keeps an uninterrupted courſe.

Laſtly, the *Drôme*, after having loſt ſome of its water in its courſe, vaniſhes entirely near the pit of *Soucy:* in that place it meets with a ſort of ſubterraneous cavity near twenty-five feet wide, and more than fifteen deep, where the river is in a manner ſtopped, and into which it enters, though without any perceptible motion, and never appears again.

We ſee by theſe obſervations of *M. Guettard*, that the rivers which looſe themſelves are not ſo few as it is generally imagined, ſince there are five of them in this part of *Normandy* which is of but ſmall extent. One might fancy that this is owing to the nature of the ground; yet, *M. Guettard* obſerves, that in a part of *Lorrain* which likewiſe is not very extenſive, five other rivers are known to looſe themſelves in the ſame manner: and without doubt we ſhall find by new obſervations that they are much more common; for as we have remarked, it perhaps is not more ſurprizing that a river looſes itſelf, than it is extraordinary that it does not ſo.

M. Guettard finiſhes this *Memoire* with ſome obſervations upon the *Ierre.* This river is loſt in the ſame manner as the *Rille:* and though it is very near *Paris*, this ſingularity is unknown to almoſt every body; were it not for the Account of *M. l'Abbe le Boeuf*, *M. Guettard* would have been alſo ignorant of it. And as he thinks that the chief object of a naturaliſt's obſervations ought to be the publick good, he examines the means which might be employed to reſtrain the water of the *Ierre.* The ſame object has made him add a deſcription of the manner how the *Rône* is loſt, or rather how its courſe is diſturbed; for it is now very certain that it does not looſe itſelf, but that its channel is extremely confined, in the place where it was pretended that it loſt itſelf, by two mountains, between whoſe feet it runs. *M. Guettard* makes it appear that it might not be impoſſible to widen that place, and give a ſufficient channel to the river; which would render it navigable, and be of vaſt utility to all the country.

We have in *Surry* the river *Mole* which riſes in *Darking* hundred, and after a conſiderable courſe, paſſes by *Whitchill* near *Darking*; a little beyond which this river hides itſelf, or is ſwallowed up in a cavern at the foot of the hill, from whence *Cambden* ſays it is called *the Swallow*; he alſo takes notice of its running under ground for about two miles, and riſing again and ſpreading itſelf into a wide ſtream. It is alſo frequently reported that there are ſeveral of theſe dipping rivers in *Wales*, and others in the ſouthern counties of *England.*

Curio

Curious paradoxical experiments relative to viſion, deſcribed and explained.

FIX upon a dark wall two little circles of white paper, at the ſame height, and about three feet diſtance from each other; and having placed yourſelf directly oppoſite to theſe papers, at the diſtance of twelve or thirteen feet, hold your finger about eight inches before your eyes, ſo as it may cover from your right eye the paper towards the left-hand, and from the left eye the paper towards the right-hand: then if you look to your finger attentively with both eyes, you will loſe the ſight of both papers entirely. This proceeds from the direction of the eyes and the ſituation of the finger; for each of the eyes receives the image of one of the objects on that inſenſible part of the *retina*, where the optic nerve enters, and the finger covers from it the other.

The ſame experiment may be made with two lighted candles, obſerving always the ſame diſtance; for if they be placed further from each other, you muſt alſo in proportion retire to a greater diſtance, otherwiſe the image of the object will not fall on that inſenſible part of the *retina*; as for inſtance, if the diſtance of the candles be ſix feet, you muſt retire to twenty-five feet diſtance, and at other diſtances in proportion; but the finger muſt always abide nearly in the ſame ſituation, for if it be placed at a foot, or any greater diſtance from the eyes, there will then appear four candles in the place of two.

Now, though it is certain from this experiment, as well as from one of Mr. *Mariotte*'s which is well known, that the *retina* is inſenſible towards the inſide of the optic axis, where the optic nerves enter the globe; yet we are never ſenſible of this defect in our ſight when both eyes are open, unleſs ſomewhat like the above artifice be employed, becauſe it is impoſſible that any object, or part of an object, can be ſo ſituated, as to have its picture on the optic axis in both eyes; and therefore what is loſt to one eye, is always viſible to the other. But had nature made our optic nerves to enter our eyes in the middle, directly oppoſite to the pupil, then the middle part of all objects would have been inviſible, becauſe its picture would have fallen upon the inſenſible part of the *retina* in both eyes, which would have been an extravagant and inſupportable defect in our ſight: to prevent which provident nature has wiſely inſerted our optic nerves, not in the optic axis, but on the inſide, towards the noſe.

We are not only inſenſible of this defect when both eyes are open, but, which is very ſurprizing, in looking at objects of an uniform colour with one eye, the other being ſhut, we are not ſenſible of any defect, or dark round ſpot, anſwering to the inſenſible part of the *retina*. This becomes very evident, when, in the manner above taken notice of, one loſes ſight of a round black paper againſt a white ground; for no defect or obſcurity is to be ſeen in the place of the black paper, but the ground appears white over all its extent, the ſame that it does when the black paper is taken away from before it: the reaſon of which ſeems

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to be, that this defect of ſenſation having been conſtantly ſupplied by the other eye, is now ſupplied by imagination only.

This inſenſibility which *Mariotte* firſt diſcovered in the *retina*, where the optic nerve enters the globe, made him ſuſpect that all authors were miſtaken in thinking the *retina* the immediate organ of ſight; and after he had fully weighed the matter, he gave in a paper to the royal academy, which was read at one of their meetings, wherein he endeavoured to prove, by ſeveral ingenious arguments, that the principal organ of viſion is not the *retina*, as was commonly believed, but that membrane lying behind it, called *choroides*. This new and ſingular opinion gave occaſion to ſeveral letters betwixt *Mariotte*, on the one hand, in favour of the *choroides*, and Mr. *Pecquet* on the other, in favour of the *retina*; wherein the arguments on both ſides were ſo dextrouſly managed, that it is very difficult for one to determine himſelf which opinion he ought to embrace.

Mr. *Mariotte*'s arguments are in ſubſtance as follow:

1. The *retina* is tranſparent, and conſequently, like all other tranſparent bodies, ſuch as air, water, *&c.* it can receive but a very faint impreſſion from the rays of light; but, on the contrary, opaque and black bodies, ſuch as the *choroides*, receives a ſtronger and more lively impreſſion, and therefore muſt be better qualified for being the principal organ of ſight.

To this *Pecquet* anſwers, that it is certain that the *retina* has ſome degree of tranſparency, by means of which the colour of the *choroides* may be ſeen through it; but this tranſparency is very far inferior to that of air or water, and is much the ſame with that of oiled paper; for if the *ſclerotic* and *choroides* be taken away from a freſh eye, and the *retina* be left extended on the vitreous humour, one ſhall not be able to ſee well through this membrane, becauſe of its opacity; and if the *retina* be immerſed in water, you ſhall obſerve it altogether white, and almoſt without tranſparency: from which he concludes, that this opacity in the *retina* is ſufficient to ſtop the rays as much as is needful for diſtinct viſion, and to hinder them from reaching the *choroides* in that quantity which the painting a diſtinct image of the object thereon would require; for if it be ſuppoſed neceſſary for viſion, that the light ſhould paſs to the *choroides*, the opacity of the *retina* would be as hurtful to the ſight, as if the *cornea*, cryſtalline, or other humours, had been tainted with the ſame opacity, which nature has always made tranſparent for tranſmitting the rays to the organ of ſight.

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Of the Logarithms of decimal Fractions.

WE can hardly ſuppoſe any of our mathematical readers unacquainted with the nature and uſe of the logarithms of common numbers; however we are of opinion that to throw a proper light upon the loga-

logarithms of decimal fractions, ſcarce treated of in books of arithmetic, may be attended with conſiderable advantages, as being of important uſe in various parts of the mathematics, eſpecially in the new aſtronomy.

According to the ordinary tables, we have for

The numbers	20000	the logarithms	4,30103
	2000		3,30103
	200		2,30103
	20		1,30103
	2		0,30103

Whence it may be concluded by analogy, obſerving the ſame geometrical progreſſion in the numbers, and the ſame arithmetical progreſſion in the logarithms, that for the numbers.

$\frac{2}{10}$ or 0,2			—1,30103
$\frac{2}{100}$ or 0,02	the	logarithms	—2,30103
$\frac{2}{1000}$ or 0,002	muſt	be	—3,30103
$\frac{2}{10000}$ or 0,0002			—4,30103

that is to ſay, that the logarithms of theſe fractions are the ſame as the logarithms of the preceding whole numbers, excepting the characteriſtics, which in the logarithms of fractions are negative, and poſitive in the logarithms of whole numbers.

To avoid theſe negative ſigns in the characteriſtics or firſt figures of logarithms, it has been cuſtomary to write their complement to 10, that is, inſtead of —1, to write +9, inſtead of —2, to ſet down +8, for —3 to uſe +7, and ſo of others; but omitting the tens in the characteriſtic of the ſum.

For example, it is required to multiply 3001 by $\frac{2532}{10000}$ or by 0,2532

The logarithm of 3001	—	3,45726
The logarithm of 0,2532	—	9,40346
Sum, omitting the tens	—	2,88072

To which anſwers 759,8

If inſtead of +9, here placed to the characteriſtic of the fractional number, —1, had been written, leaving the reſt of the figures the ſame, there would have been preciſely the ſame ſum; which makes it eaſy to apprehend, that the ſubſtitution of +9 in the place of —1, alters nothing as to the calculus, if the tens be omitted.

On this principle it is that the logarithms of ſigns, almoſt all of which begin with 8 or 9, are to be underſtood, becauſe we are to ſuppoſe that they are always fractions of the radius or total ſine. Suppoſe the ſine of 5° 44′, which is 0,0999, were to be multiplied by the ſine of 30′, which is equal to $\frac{1}{2}$ or 0,5: the tabluar log-ſine of 5° 44″ is 8,99956

log-ſine of 30° is 9,69897

Sum, or log of 0,04995 8,69853

But if negative characteriſtics had been made uſe of, there would have been —2 to be added to —1; the ſum —3 muſt have been reduced to —2, on account of the preceding tens, which is the ſame as +8, as we have ſeen that —2 or +8 equally indicate that there are no more than hundreds in the propoſed fraction.

Thus in general, for ſuch fractions as

0,234
0,0234
0,00234
0,000234

we ſhall have the characteriſtic 9, 8, 7, 6, and ſo on, obſerving that *the characteriſtic is always the complement* to 9, of cyphers after the comma in the given number.

If the fraction 0,0999 were to be divided by the fraction 0,5, there would be a ſubſtraction to be made in the following manner,

8,99956 A
9,69897 B

9,30059 C

That is, a ten would be ſuppoſed on the ſide of the characteriſtic 8, and 9 to be ſubſtracted from 18. In effect, when the ſuperabundant tens are omitted in the addition they are for the ſame reaſon ſupplied in the ſubſtraction. If in the preceding operation, you add B and C, there will be 18 for the characteriſtic of A; which is the reaſon why we ſuppoſe it equal to 18, to make the ſubſtraction.

If it were required to get the ſquare root of the fraction 0,0999, that is to divide its logarithm by 2, the logarithm of the fraction muſt be written 18,99956, the half of which 9,49978 would be the logarithm of its root 0,316. If the cube root of the fraction 0,6258 were required, whoſe logarithm is 9,79643, the characteriſtic muſt be ſuppoſed 29 inſtead of 9, the third of which is 9,93214, the logarithm of 0,8554 the cube root required.

Of the theory of the ſubdiviſions of Mathematical Inſtruments, *and its application to practice.*

Of the method of ſubdivding mathematical inſtruments by diagonals.

FIG. 1. and 2. repreſent each a portion of the limb of an inſtrument, divided according to the method of diagonals. Each portion contains two degrees, which degrees are ſubdivided each into ſix equal parts, or into every ten minutes: each has two arcs graduted in this manner; the principal one *a b*, which is on the outſide of the limb, and the other *c d* which is on the inſide of it. The diſtance between theſe arcs is ſuppoſed the ſame in both figures; and they differ in this only, that fig. 1. repreſents *Tycho Brahe*'s diagonals, and fig. 2. the common modern ones. The fundamental principle of both being the ſame, we ſhall confine ourſelves to the explanation of the ſecond, being the only one now in uſe, nor can we ſay any thing eſſential of this which is not eaſily applicable to the other.

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This method conſiſts firſt, in deſcribing the two before mentioned concentric and parallel arches *a b*, *c d*; the diſtance between which is not altogether arbitrary or indifferent, as it greatly concerns the preciſion or imperfection of the method. *Tycho* aſſumes this diſtance $\frac{1}{48}$ of the radius; and has ſhewn that in his aſſumption the greateſt error occaſioned by the diagonals does not exceed three ſeconds of a degree.

Secondly, in dividing the ſecond arch *c d* into as many equal parts, as the firſt *a b*.

Thirdly, in deſcribing in the interval compriſed between the two arches, a certain number of arches equidiſtant from one another, and concentric and parallel to the two former arches, in ſuch ſort that beginning from the exterior arc *a b* and proceeding to the interior arc *c d*, the diſtance from one arch to the next ſhall be always equal.

Fourthly, in joining by right lines, the points of the diviſion of the interior arch with thoſe of the diviſion of the exterior; obſerving to draw theſe lines, not in the direction of the radius, or from one point of the interior diviſion to the correſponding point of the exterior; but in an oblique direction, that is to ſay, from a point of the interior diviſion to the point of the exterior which immediately follows the correſponding one; as from 0° on the interior to 0° 10′ on the exterior, when the inſtrument is divided into every ten minutes; or from 0° on the interior to 0° 20′ on the exterior, when it is divided into every 20 minutes.

The number of concentric arches between the two graduated ones *ab*, *cd*, is not limited, but as many may be drawn as can be, without confuſion. On the limb of a quadrant, divided into every ten minutes, there may be eleven concentric arches, reckoning in the two extreme ones. Nine of theſe are interſected by each diagonal; ſo that the plumb-line, having reſted exactly over any one point of the graduation cannot arrive at that which is immediately next it, without paſſing over the nine points of interſection of the diagonal with the concentric arches. If after the obſervation has been made, the plumb-line is found to hang in the interval between two points of the diviſion; as between 40° and 40° 10′ it muſt be examined what point of interſection of the diagonal with the concentric circles it correſponds to. If it be to the firſt point between 40° and 40° 10′ a minute is to be added to 40°, and the determinate quantity of the obſerved angle muſt be ſet down 40° 1′. If to the fifth, five minutes muſt be added, and ſo of the reſt.

The theory and uſe of diagonals annexed to rulers or ſcales of equal parts, is well known; and the whole difference between ſuch a ſcale, and the method of applying diagonals to the arches of circles, is, that the former conſiſts of right lines only, whereas portions of circular arches are concerned in the latter; which upon this account, cannot, ſtrictly ſpeaking, be exempt from error: but, as has been remarked above, ſuch errors cannot be ſenſible, except in ſmall inſtruments, where the diſtance between the two extreme arches, is frequently taken much greater than a 48th part of the radius. On the other hand, it is

not diſtinguiſhable in large inſtruments, eſpecially where the diſtance between the extreme arches is leſs than $\frac{1}{48}$ of the radius, as it was in Mr. *Flamſteed*'s ſector and mural arch at *Greenwich*.

The primary diviſion of the limb of an inſtrument being given, it is eaſy to find the number of concentric equidiſtant arches to be deſcribed, for ſubdividing the ſpace between two ſucceſſive points of the graduation by the diagonal, into minutes, half minutes, or quarter minutes. Let, for example, the limb of an inſtrument be divided into every 12 minutes. To ſubdivide into 12 equal parts or into minutes, a ſpace which contains 12 of them there will be required 11 points of interſection, and thirteen concentric arches. To ſubdivide the ſame ſpace into 24 equal parts, or half minutes, there muſt be 25 concentric arches and 23 points of interſection.

The general rule is, that *the number of concentric arches muſt exceed by unity, that of the equal parts, into which the ſpace between two adjacent points of the graduation is required to be ſubdivided.*

And the diviſion of the inſtrument, and the number of the concentric arches being given, the value of the equal parts of the ſubdiviſion by the interſections, will be known. For example, in an inſtrument divided into every 20 minutes, I count eleven concentric arches, and conſequently nine points of interſection; wherefore the ſpace of 20 minutes is ſubdivided by thoſe 9 points into 10 equal parts, and each point of interſection gives 2 minutes.

The general rule is, *count the number of concentric arches (always reckoning in the two extremes) and by that number leſſened by unity, divide that of the minutes and ſeconds contained between two adjacent points of the graduation: the quotient will give the value of the parts ſhewn by the points of interſection.*

To ſave the obſerver the pains of this operation, the inſtrument-makers uſually take care to engrave along the fiducial edge of the inflexible index, where ſuch is made uſe of, as *c o* in Fig. 3. againſt each of the concentric arches cut by the diagonal, figures which ſhew the number of minutes, *&c.* given by the reſpective points of interſection.

After all, this method by diagonals is liable to great difficulties in the execution. In the firſt place, the two extreme arches muſt be divided with equal accuracy. The artiſts well know the difficulty of dividing a ſingle arch to a requiſite preciſion, and to how many errors they are expoſed in attempting to divide a quarter of the circumference of a circle into every 10 minutes, or into 540 perfectly equal Parts. Moreover, in this caſe, there are to be deſcribed a certain number of arches concentric with the primary ones and with one another, all at equal diſtances: And laſtly all the diviſions of the two extreme arches are to be joined by right lines on the diagonals. Now, in the determining of ſo great a number of points, and drawing ſo many arches and lines, it is extremely hard to keep up to that juſtneſs, which aſtronomical obſervations, to which the inſtrument is deſtined, do require.

quire. Again, diagonals are attended with inconveniencies in their uſe; the plumb-line, and the alidade, or moveable radius that carries the index, muſt needs cut theſe lines very obliquely; conſequently, it is not eaſy for the eye to determine exactly the place in which the diagonal is interſected; if, for example, in the point of interſection of the diagonal with the concentric arch, or in the middle of the interval between two points of interſection, or at $\frac{1}{4}$ or $\frac{1}{3}$ of ſuch interval. This inconvenience becomes ſtill greater in octants than in quadrants, on account of the ſmallneſs of their diviſions, and the little diſtance between the concentric arches; inſomuch that it is eaſy to be miſtaken a minute in eſtimating by the naked eye.

Of Vernier's *method of ſubdiviſion, commonly called the* Nonius.

Let A B C D E F, Fig. 4. be a right line divided into any number of equal Parts, for inſtance, into 5. Let *a b c d e f g h* be another right line equal in length to the former, divided likewiſe into a number of equal parts, but ſo that their number exceeds by unity that of the other. According to this ſuppoſition we ſhall have, 1° the right line A F equal to the right line *a g*. 2°. the right line A F, divided into a number (*n*) of equal parts. 3°. the right line *a g* divided into a number (*n* + 1) of equal parts. That is to ſay, that if A F is divided into 5 parts, *a g* will be divided into 6. If A F is 20, *a g* will be 21, *&c.* Let us now conſider the ſeveral conſequences of this ſuppoſition.

Firſt, each part of A F will exceed each of the parts of *a g*. The exceſs of any part of A F above any part of *a g*, will be conſtantly the ſame, whatſoever be the parts compared with each other. All this evidently follows from the hypotheſis.

Secondly, as theſe two lines are eqnal, they may be conceived as placed one over the other, or one contiguous to the other, ſo that their extremities ſhall perfectly tally; that A, for example, tallies with *a*, and F with *g*.

Thirdly, theſe two lines being thus poſited, and their extremities exactly concurring, no other of their diviſions will agree with its correſpondent one in quantity. For A B, being greater than *a b*, the points B and *b* cannot fall upon one another, when the points A and *a* concur. For the ſame reaſon A C or 2 A B, being greater than *a c*, or 2 *a b*, the points C and *c*, can never meet, whilſt A is on or concurs with *a*. The ſame holds good of the points D and *d*, E and *e*, F and *f*, *&c.*

Fourthly, the two lines remaining in the ſame poſition, and the points A and *a* being united; the point B will be farther from A or *a*, than *c*, by the quantity B *b*. C will be farther from A or *a*, by double the quantity B *b* (for ſince A *b* exceeds *a b*, by the quantity B *b*, A C or 2 A B will exceed *a c* or 2 *a b*, by twice the ſame quantity B *b*) and ſo on; ſo that F, the laſt point of diviſion of A F, will be farther from

from A or *a*, than *f* the laſt point but one of diviſion of *ag* (or correſpondent of F as to quantity) by five times the quantity B*b*.

Fifthly, if the poſition of one of the lines, for example *ag*, be altered by cauſing it to ſlide along A F, it is viſible that the extremities A and *a*, F and *f* will no longer concur. Let us ſuppoſe then that ſome one of the diviſions of *ag* concurs with one of thoſe of A F, that *d* falls upon D, or *b* upon B; I ſay that in this caſe no other of the diviſions can concur with any diviſion of A F.

For, 1°. As to the other points on the left; *b* and *c* were ſo far diſtant from the points B and C (by the laſt paragraph but one) as the point *d* from the point D. Therefore *d* having fallen on D, the point *b* has already paſſed over the point B, and the point *c* over the point C. 2°. As to the points on the right; *e* and *f* were farther diſtant from the points E and F than the point *d* from the point D; therefore, *d* arriving at D, *e* will not yet have arrived at E, much leſs *f* at F.

Therefore the two lines A F, *ag*, being contiguous, and moving parallel to each other, there can never be more than one of their reſpective diviſions conjoined at once, the two extremities excepted. It may alſo happen that none of them all ſhall be conjoined: for the parts of *ag* being ſmaller than thoſe of A *f*, the points *b* and *c*, for example, may both fall between B and C, or *c* and *d* between C and D, &c. Now in all theſe poſitions it is manifeſt that no one of the diviſions of *ag* can concur with any of thoſe of A F.

Remark. *If inſtead of the two equal lines* A F, *ag*, *divided the one into* 5, *the other into* 6 *equal parts*, *we ſuppoſe any two other equal lines*, *each divided into any number of equal parts at pleaſure*, *obſerving only the above ſtated condition*, *that the number of equal parts of one*, *exceeds the number of equal parts of the other by unity*; *we may eaſily apply to them all that has been already ſaid*, *and all that we are yet to ſay of thoſe. The reaſon is that all our aſſertions are founded alone on the double hypotheſis of the equality of the lines*, *and of their diviſion into a number of equal parts*, *greater by unity in one than in the other. Let us reſume the chain of our reflexions on the two lines* A F, *ag*, *propoſed for example.*

Sixthly, the quantity B*b* (fig. 4.) the difference between the two firſt parts A B and *a b* of the ſaid lines has been ſhewn to be equal to the quantity E*f*, the difference between the two laſt parts of the ſaid lines. Therefore, as it has been ſhewn that F is farther from A or *a*, than *f* its correſpondent as to quantity, by five times the quantity B*b*; and that the diſtance of *f* from E, is beſides equal to once the quantity B*b*, it follows that E F or A B is equal to ſix times the quantity B*b*, or that B*b* is equal to $\frac{1}{6}$ of A B.

Seventhly. From hence may be deduced a formula to expreſs the value of B*b*, or the difference of each part of one of the lines, from each part of the other; for if P be put for each of the parts of the line divided into a leſſer number, and *p* for each of the parts of that divided into the greater number, and *n* for the number of parts in that which

has the leſſer number. Then $Bb = P - p = \frac{P}{n+1}$; and alſo Bb or $P - p = \frac{p}{n}$. That is, after what manner ſoever you chooſe to expreſs $B\,b$; whether by a fraction relative to the line divided into a leſſer number, or a fraction relative to the line divided into a larger number; you are always to take for the numerator one of the parts of that line; and for the denominator, the number of the parts of the other. Thus in the preſent caſe $B\,b$ is found $= \frac{1}{6}$ A B, and $B\,b = \frac{1}{5}\,a\,b$.

The reſt of the figures, *viz.* fig. 5, 6, 7, 8, 9, 10, need no particular explanation, being intended to repreſent to the eye various ways of combining the fixed with the moveable line, and the application of degrees, minutes, *&c.* to them; where the index on the moveable line or *Nonius*, is repreſented by the point of a little arrow.

When the moveable arch or *Nonius* is divided into one part more than the correſponding fixed arch, on the limb of an inſtrument, it is called a *Nonius of the firſt kind*; and a *Nonius of the ſecond kind* is that whoſe arch is divided into one part leſs than its correſpondent fixed arch. The firſt kind is moſt uſed in mathematical inſtruments, ſuch as is repreſented by fig. 11. where B repreſents, part of an arch, as in *Hadley*'s octant, divided into 90 equal parts, each of which is again divided into 3. The extremity A D F of the moveable radius or alidade has a ſquare perforation chamfered on every ſide as *m n p o*, through which a good number of the diviſions on the limb are ſeen. The arch *n o* on the alidade moves parallel and contiguous to that on the limb, and is divided into equal parts, in number more by one than thoſe of the correſpondent arch on the limb, the index in the middle at *f* being repreſented by a *fleur de lis*.

We need not now heſitate to give the preference to the method of ſubdiviſion by the *Nonius* before that by diagonals. The execution of the latter, as has been already remarked, is extremely troubleſome, and ſcarce practicable to exactneſs, whereas that of the *Nonius* is altogether ſimple and eaſy. No aſtronomer, perhaps, ever underwent the drudgery of verifying a diagonal diviſion throughout; to ſatisfy himſelf that all the concentric arches are deſcribed at equal diſtances from one another; that the two extreme arches are truly divided; that each diagonal is a ſtraight line, that it is drawn accurately from one point of graduation to the other, without deflecting to right or left, *&c.*——The very idea of ſo diſguſting an operation is enough to diſcourage the moſt patient obſerver, and he muſt rely upon the reputation and ability of the artiſt who executed the diviſion; that is, he is certain of nothing.

But ſuppoſing for once that a diagonal diviſion is well performed, let us call to mind what has been already ſaid of the difficulty of determining the point of the diagonal cut by the fiducial edge of the alidade, through the great obliquity of their interſection.

How

How different as to all theſe conſiderations is the *Nonius?* Here is nothing to do with oblique interſections. It is neceſſary only to caſt an eye upon an arch divided into equal parts, and to ſingle out that particular diviſion which meet another diviſion on the limb, both marked by equal and ſimilar ſtrokes. When the ſtroke on the *Nonius* makes one right line with another on the limb, there can be nothing of ambiguity, and the eye can decide ſo juſtly, that in a *Nonius* which gives the minute, the judgment is ſcarce liable to err ſo much as a minute.

Sketches of carriages conſtructed for the uſes of agriculture.

AS I imagine, from what has already appeared of your uſeful deſign, that it is calculated to bring improvements of every kind to light, and to introduce them to the notice of thoſe who can receive any advantage from them, I take the liberty of ſending you the encloſed ſketches of carriages conſtructed for the uſes of agriculture.

I have ſeen ſomething reſembling one of the carriages in a French book; the others are, I imagine, entirely new.

Fig. 1. is a wheelbarrow, in which a broad wheel, three feet diameter, is placed at A, and covered over with a box.

B, the wheel, lying between the two extremes, if the weight is placed equally on each ſide of it, preſerves the barrow in equilibrio, and requires no labour but to puſh it forwards; whereas, in the common barrows, half the weight is to be ſupported by the labourer.

Fig. 2. is a barrow of another conſtruction: A is a large cylinder, like thoſe with which gravel-walks are rolled. It may be made of caſt iron, as the common rollers, or of wood.

B B, two buckets, which are to carry the burden, equally divided between them. The ſides, C C, of the two buckets, ſlide out, ſo as to let the burdens fall out, by ſucceſſively lowering the two extremes.

This has the advantage of the former barrow, and avoids marking the graſs or gravel over which it rolls; an inconvenience that attends all the machines of this kind now in uſe. It ſerves alſo for a roller, and is particularly ſerviceable in making gravel-walks. From the figure it appears, that a cart might be made upon the ſame principle, which might ſerve to roll land, but would be of moſt ſervice in the making artificial levels, *&c.* in gentlemen's improvements.

Fig. 3. is a cart for hay: the wheels ten feet high, and ten inches broad: the axle, A, longer than is common, and paſſing through the body of the cart, to prevent its being liable to over-turn, and to make the ſhafts on a level with the horſes breaſts.

It is peculiarly adapted to carry hay, as by its breadth it will ſpread that hay which in other carts they are obliged to pile up ſo high as to endanger the carriage and its horſes.

I

Fig. 4

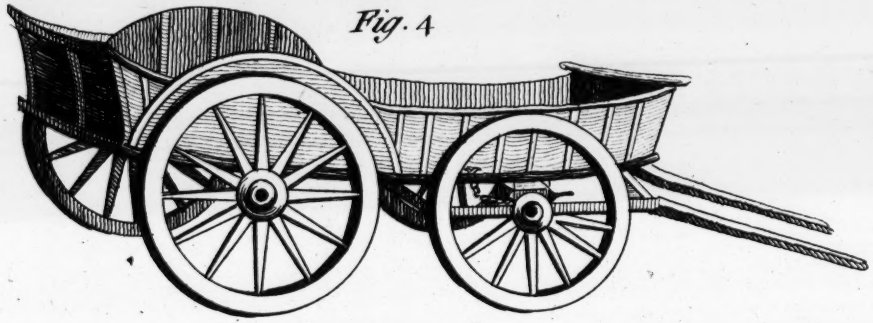


*Fig.*3

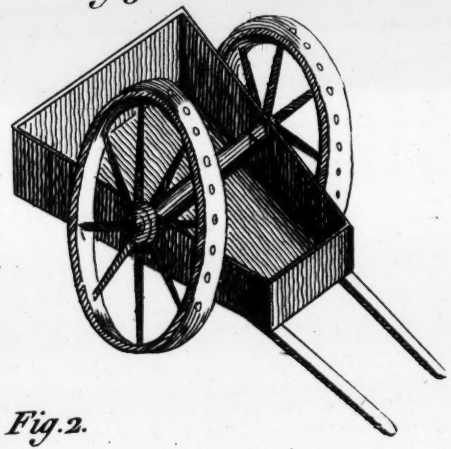
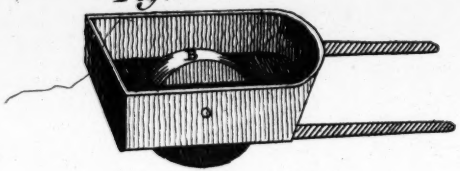


*Fig.*5

*Fig.*1.



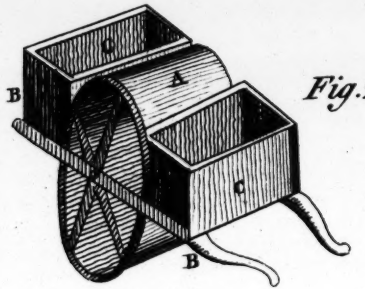


*Fig.*2.

I have models making of wheels of various diameters and breadths, with proper carriages, to aſcertain, by experiments, the proper mean in both theſe points, *viz.* their length and breadth, ſo as to give the greateſt power, and at the ſame time avoid the danger of overſetting, attendant on high wheels; and the weight gathered by very broad wheels in a ſtiff ſoil.

I ſhall alſo endeavour to find out the moſt proper point on which the bulk of the weight ſhould be placed in four wheeled carriages, as I have obſerved, that when the weight is thrown a great way behind the hindmoſt wheels, the carriage moves with more eaſe.

If the reſult of theſe experiments ſhould ſuit your deſign, I ſhall think myſelf happy in communicating them.

Oxford. R. L. E.

An improvement on the waggon, by Mr. BELLAS, *of* Yattendon, *in* Berks.

HAVING obſerved the bad conſequences of turning ſhort with a heavy load, *viz.* broken wheels, thills, traces, *&c. &c.* I was inclined to be at ſome little expence of thought, in order, if poſſible, to guard againſt them.

This I have done by two chains, about two feet in length each, to be fixed at one end by a pin about three quarters of an inch diameter, through the fore bed, about one foot behind the upper pillow, and keyed; the other through the under pillow, by a pin about one foot in length, and a nut, to ſcrew it to what length may be neceſſary: (ſee fig 4. and 5.) theſe chains, on each ſide one, to hang looſe when the waggon is drawn in a right line; but upon the turn to check it juſt before it locks. Thus guarded, the wheels will be at liberty to perform their office, but without it you are ſubject to all the inconveniences above mentioned.

Mechanical improvements in theory are frequently clogged, either with ſome difficulty in the execution, or expence, which over-balances the advantages propoſed; but this is not ſubject to either, as I have applied it to my waggon, and it was executed by a common blackſmith for four ſhillings. The ſketch (ſee the plate) may perhaps make it more intelligible.

Fig. 4. is a Berkſhire waggon with the check-chains fixed; the upper ſpokes of the fore wheel being omitted, in order to diſcover the poſition of the check-chain, and the manner of fixing it.

Fig. 5. is the check-chain more at large: at the end, *a*, is the iron pin and key; at *d* may be ſeen the iron, with the ſcrew and nut, by which it is faſtened to the under pillow: the dimenſions are as follow; from *a* to *b* meaſures ſix inches; from *b* to *c*, being the length of the chain, two feet; from *c* to *d* twelve inches.

N. B. The two check-chains, together, may weigh about eleven or twelve pounds.

An account of ſymptoms ariſing from eating the ſeeds of Henbane, with their cure, &c. and ſome occaſional remarks, by Sir Hans Sloane.

IN 1729, a perſon came to conſult Sir *Hans Sloane* upon an accident that befel four of his children, aged from four years and a half, to thirteen years and a half, by their eating ſome ſeeds they had gathered in the fields, which they miſtook for filberds: by one of the capſules, Sir *Hans* inſtantly knew it to be that of the *Hyoſcyamus niger, vel vulgaris, C. B.* (or the common Henbane) which bears ſome groſs reſemblance to the huſk of a filberd, and the ſeeds reſemble thoſe of the poppy. The ſymptoms that appeared in all the four were, great thirſt, ſwimmings in the head, dimneſs of ſight, ravings, and profound ſleep; which laſt in one of them continued for two days and two nights. Sir *Hans* ordered them all to be bled, bliſtered in ſeveral places, and afterwards purged with a medicine compoſed of *Elect. lenit. ol. amygd. dulc. flor. ſulphur. &. ſyr. flor. perſicor.* which operated both by vomit and ſtool, and by this method they perfectly recovered.

The delirium occaſioned by theſe ſeeds differs from the common, and in ſome meaſure agrees with that produced by the dutroa, a ſpecies of ſtramonium, and by the bangue of *Eaſt-India*, a ſort of hemp: and they are all different from that kind of diſorder cauſed by the rubbing with a certain ointment made uſe of by witches (according to *Lacuna*, in his verſion and comments upon *Dioſcorides*) the effect of which, as he was told, is to throw the perſons into a deep ſleep, and make them dream ſo ſtrongly of being carried in the air to diſtant places, and there meeting with others of their diabolical fraternity, that when they awake, they actually believe, and have confeſſed that they have performed ſuch extravagant actions.

Here Sir *Hans Sloane* gives an inſtance of the great virtues of Henbane-ſeeds in the tooth-ach. A perſon of quality tormented with this racking pain, had an empiric recommended to him. The quack conveyed the ſmoke of burning Henbane-ſeeds, by means of a funnel, into the hollow tooth, and thereby removed the pain; but at the ſame time there dropped ſome maggots from the tooth (as he pretended) into a pail of water placed underneath for that purpoſe. Sir *Hans* procured one of theſe maggots, which he ſent wrapt up to M. *Lewenhoeck*, at *Delft* in *Holland*, where it arrived ſafe and alive. Upon examination, M. *Lewenhoeck* found it to be entirely like thoſe bred in ordinary rotten cheeſe: wherefore he procured ſome of theſe latter, and carefully fed them both, and that one Sir *Hans* had ſent, on the ſame cheeſe, and they were all, according to the uſual methods of nature, turned into ſmall ſcarabæi, both being returned ſuch to Sir *Hans* from *Holland*.

Upon the whole, though the ſmoke of the Henbane-ſeeds cured the tooth ach, it is highly probable, the maggots had been conveyed thither, and let drop into the water by ſome ſleight of hand.

P. T

O

Of white Gold or PLATINA.

THE hiſtory of this metal was altogether unknown before the beginning of the preſent century. This however is no proof that it was altogether unknown in former times, though it may be taken for granted that no uſe was made of it; and the great difficulty there ſtill ſubſiſts of fluxing it, adds to the probability of this opinion. How long ſoever it may be that this metal was firſt diſcovered, its properties are at this time but new truths, of which it is very likely that a conſiderable number lie ſtill concealed, and that thoſe already found out, might turn to advantage by being re-examined, and confirmed by new experiments.

The firſt who ſearched into the nature of *Platina*, was Mr. *Wood*, an *Engliſh* metallurgiſt; whoſe operations on this ſubject are recorded in the *Philoſophical Tranſactions* for the year 1750, ſince which time Mr. *Scheffer* and Dr. *Lewis* have directed their enquiries to the ſame object. The reſult of the trials of the former are printed in the *Memoires of the Academy of Sweden* for the year 1751, and of the latter in the *Philoſophical Tranſactions* for 1754. Theſe are the principal works concerning this ſubject which appeared abroad before Mr. *Macquer's*, of which we ſhall here give an account: we ſhould obſerve however, that Mr. *Margraaf* has likewiſe read a memoire upon it to the academy of *Berlin*, but his reſearches were not made publick, before Mr. *Macquer* had compleated his enquiries.

The platina on which Mr. *Macquer* made his experiments, has, like that which was examined by the other chymiſts, the following characters; it is in ſmall and pretty ſmooth grains, moſt of them reſembling, as to their figure, pyramidal triangles with blunted points; their colour not much unlike that of coarſe filings of unruſted iron, but approaching nearer to a ſilvery whiteneſs, after being ſoaked in an acid or heated to a high degree. Mr. *Macquer* ſuppoſes, with great probability, that the metal owes its name to this laſt property, as derived from the word *plata*, which in *Spaniſh* ſignifies ſilver.

The name of *white gold*, which has likewiſe been given to this metal, ariſes out of certain properties which alſo belong to gold; ſuch as to be nearly of the ſame ſpecific gravity as gold; to reſiſt, like that, the action of ſulphur, lead, antimony, the royal cement, and all pure acids; and to ſubmit, like gold, to no ſolvent but *aqua regalis*, and *hepar ſulphuris*.

None of the platina that has been hitherto examined, is perfectly homogene: gold is ſometimes found in it, as in that which Mr. *Macquer* examined. The ſubſtance moſt frequently met with among it, and in the greateſt quantity, is a ſmall black ſand, brillant and very pointed, which the load-ſtone attracts as readily as iron.

In order to examine the ductility and other properties of platina, it was neceſſary to procure an ingot of it of a proper ſize; but the ſucceſs-

leſs attempts that had till then been made to flux it, left but little hopes of any ſuch thing. True it is that there might ſtill be ways of encreaſing the activity of fire, beyond what the chymiſts had yet been able to do, and this conſideration determined Mr. *Macquer*, to have recourſe to new expedients. The wind furnace and the forge had proved uſeleſs, though the fire had been kept up fifty hours. A fire capable of fuſing the mixtures of Mr. *Pott*, in his lithogeognoſy, and ſaid to have afforded him the hardeſt and the leaſt brittle glaſs, would not fuſe platina, but only agglutinate its grains together. This experiment produced ſome other phænomena, amongſt which one hitherto unobſerved, namely an actual increaſe of the weight of the platina on which the experiment was made, no leſs than fourteen grains on an ounce. This platina thus increaſed in weight, was ſubjected to a ſecond trial, which produced a ſecond increaſe; leſs indeed, but yet ſenſible. The augmentation Mr. *Macquer* aſcribes to a calcination of ſome ſubſtance of a different nature from the platina, intermixed with it; for 'tis well known that there are ſome ſubſtances, as vitriol, antimony, *&c.* whoſe weight is increaſed by calcination.

The platina was expoſed to the heat of the glaſs-houſe at *Sévres* for five days and nights together, without any other alteration of it than ſuch as above mentioned.

After ſuch ſort of trials, 'twas not to be expected to gain any new diſcovery by means of ſuch furnaces as are employed in chymical operations; but a thirſt of knowledge animates the imagination and furniſhes contrivances. Mr. *Macquer* found the means of producing in the forge of his own eleboratory, a heat far ſtronger than what has been known to be done. To this end he added two large pair of double bellows, to that of the forge, and concentrated their action in one focus. This diſpoſition greatly increaſed the heat: in leſs than an hour and a quarter the lining of the furnace melted all down, and formed maſſes of glaſs which choaked the noſes of the bellows; the crucible was alſo vitrified, but the obſtinate platina exhibited only ſome grains perfectly round, as white as ſilver, which ſeemed to have undergone a perfect fuſion; yet a ſlight ſtroke of a hammer reduced them to powder.

After having in vain employed the ſeveral means we have recited, there ſtill remained one which promiſed ſome degree of hope, and the rather worth trying, as it had never been made uſe of by any chymiſt in the examination of platina; this was to expoſe the platina to the focus of a good burning ſpeculum.

The ſpeculum Mr. *Macquer* uſed was of glaſs, its diameter two and twenty inches, and the diſtance of its focus twenty eight inches. In half a minute it melted a gun-flint, and changed it into tranſparent glaſs; vitrified *Heſſian* crucibles and fragments of glaſs-houſe pots in three or four ſeconds; forged iron fumes, melts, boils, and turns to a vitreſcent ſcoria in an inſtant: even the gypſeous ſtones, which Mr. *Pott* ſeems to regard as unfuſible, are melted by it.

Then

These effects with several others, invited Mr. *Macquer* to submit platina to such an agent; he did so, and here follows the result.

The platina he used is that said above to have been exposed to a glass-house fire, and whose grains were agglutinated together; as they were then in a solid mass, they could be the more conveniently exposed to the focus by holding the lump between a pair of pincers; besides, the surface of this lump being tarnished and brown, it was thereby the fitter to absorb the solar rays, whereas the metallic brillancy which these grains naturally have when separate, promised less success.

The platina thus exposed to the focus of the speculum, first turned to a bluish white, casting off by fits very lively sparks, and diffusing a very sensible fume; finally, in about a minute it was in a true fusion; but with this particular that the melted parts did not drop to the ground, but attached themselves to those next the limits of the field of the focus.

Those melted parts shone like silver, and their surface was rounded, bright and polished. Being hammered on a small steel anvil, they were flatted to a thin plate without any cracking; in a word they afforded sufficient marks of malleability, not only far beyond what they had before the fusion, but even such as gave hopes that they might be spread as thin as the leaves of gold or silver.

Mr. *Macquer* having examined the properties which the action of fire discovers in platina, submitted this metal to the action of other solvents. Of all the acid menstruums *aqua regalis* alone proved a solvent of platina, at least whilst it remained in its natural state.

This dissolution produces various phænomena. It requires a great quantity of *aqua regalis*, and is effected much more easily by a sand heat than without it. Mr. *Macquer* takes notice that the precipitates of platina made with volatile and fixed alkalis, have not that red colour which Dr. *Lewis* attributes to them in general, except when no more of those alkalis is used than what is barely sufficient to saturate the acid: which observation led him to a very natural explanation of the colour the precipitate assumes in the case we have been speaking of.

It has been long known in chymistry, that precipitates always carry down along with them part of the dissolvent and of the precipitant: this truth, which is abundantly sensible in the precipitate of platina, afforded Mr. *Macquer* the means of accounting for several phænomena which Dr. *Lewis* had noticed in the precipitation of platina, though that learned chymist has not explained them.

The red precipitate of platina, mixed with a flux composed of calcined borax, cream of tartar and white glass, after being exposed to a forge heat, produced a lump of the complexion of platina with all the resemblance of a metal that had been well melted; although this lump had not the satisfactory tokens of malleability, yet there is room to believe that the fusion had not been sufficiently perfect: this is a point which Mr. *Macquer* intends to examine hereafter, as also the vitrescent matter

matter, into which the precipitate of platina was converted, after the operation of the ſpeculum.

The cupellation of platina by lead is alſo one of the objects which have been examined by Dr. *Lewis*, and wherein Mr. *Macquer* propoſed to ſurmount the difficulties which that ingenious gentleman ſeems to have met with: this operation gave Mr. *Macquer* a reſult which at firſt ſeemed no more ſucceſsful than thoſe of Dr. *Lewis*; but a repeated examination opened to him very different properties; the platina inſtead of increaſing in weight, as Dr. *Lewis* had obſerved, was found to have loſt a ſixteenth part; it was moreover very extenſible under the hammer. The ſame platina cupelled, and then diſſolved in *aqua regalis*, ſhewed not the leaſt marks of any remaining lead.

The whole of Mr. *Macquer*'s obſervations compared with what other chymiſts have delivered about this metal, ſeems to eſtabliſh the following matters of fact. That platina is a third perfect metal, as fixed, as indeſtructible, as unalterable, as gold and ſilver; that it is not abſolutely unfuſible; that there is even room to hope, that by mixing it with deſtructible metals, and employing a ſufficiently durable and intenſe heat, it may be fluxed in large furnaces. The attempts that have hitherto, or may be hereafter made with this view cannot be too much applauded; it is eaſy to apprehend of how great utility in arts, a metal may prove which reſiſts the action of air, water, fire, ſulphur, acids, and the voracious metals, and has the ſtrength and hardneſs of iron combined with all theſe qualities. Wiſe motives have determined the *Spaniſh* miniſtry to interdict the working of their platina mines, and to prohibit the commerce of it: however the lights that chymiſtry has already let us into concerning this metal, may ſet us eaſy as to any abuſes that may be made of it, and afford hopes, that it may in due time be the more eaſily procured, and further experiments made upon it.

Curious obſervations on luminous particles on the ſurface of the ſea; or the ſea iris, and ſhining exhalations. By Captain JOHN CHANDLER.

WHEN a ſhip is under full ſail we often ſee a great light in her wake, that is, in the water ſhe has run through, and, as it were broken in her paſſage. Thoſe who do not look narrowly at this light often attribute it to the moon, the ſtars, or the lantern at the ſtern. But by a little attention this miſtake may be rectified; for the light is greateſt, *cæteris paribus*, when the moon is under the horizon, when the ſtars are clouded, and when the candles are extinguiſhed, and no other light is ſeen near the ſurface of the ſea.

This light is not always equal, and on ſome occaſions is ſcarce at all diſcernible. Nor is it alike in all ſeas, the *Adriatic* according to many obſervations moſtly abounding in it. Sometimes it is clear, and at others languid; ſometimes widely extended, at others not.

I have known it ſometimes ſo great as to be able to read by it nine or ten feet above the ſurface of the water: as for its extent, ſometimes the whole wake appears luminous for the ſpace of thirty or forty feet, but the light decreaſes in proportion as it is further from the ſhip.

Sometimes we may in the wake, diſtinguiſh eaſily the luminous from the obſcure parts; on which occaſion the wake appears like a beautiful river of milk.

When we can diſtinguiſh the luminous from the other parts, we perceive that they are not all of the ſame figure: ſome are only ſparks, while others appear as large as the ſtars do in a ſerene night. Some are globular, and one or two tenths of an inch in diameter, others ſeem to be globes as big as a man's head. Theſe luminous bodies are often formed into parallellograms three or four inches long, and one or two broad. Sometimes many of different figures are ſeen at once. Sometimes the wake of the veſſel is full of lights which have a vertical twirling. At other times, when the motion of the ſhip is ſlow, this twirling ſuddenly appears and diſappears, like flaſhes of lightning.

It is not only the wake of the ſhip which produces this light, for the motion of fiſh will ſometimes excite it ſufficiently to diſtinguiſh their bulk and ſpecies. Sometimes a numerous ſhoal of theſe fiſh, when ſporting in the ſea, excite an artificial and very entertaining kind of fire. Very often a rope oppoſed to the motion of the waves, has the power of rendering them luminous.

If ſea water be ſtirred in the dark, we find an infinite number of ſhining particles in it. If a piece of linen be dipped in it, and wrung in the dark, the ſame thing is ſeen, and alſo a number of ſparks flying out of it, if it be ſhaken when half dry.

When one of the ſparks is formed, it laſts a long time; and if it falls on any ſolid body, ſuch as the edge of a veſſel, it will laſt for ſeveral hours.

It is not always when the ſhip goes faſteſt, or the ſea is much agitated, that moſt of thoſe ſparks do appear. Neither is it the ſimple ſhock of the waves againſt each other, which produces them; ſince the action of the waves on the ſhore ſometimes generates a great quantity of them. On the coaſt of *Braſil* the ſhore ſometimes appears all on fire with theſe ſparks.

The production of them depends in a great meaſure, on the quality of the water; and, generally ſpeaking, this light is greateſt, when the ſea is moſt foaming; for at full ſea the water is not every where equally pure. Sometimes a piece of linen dipped in the ſea, comes out all over glutinous. It is obſervable that when the wake is moſt ſhining, the water is moſt viſcid and fat. A cloth dipped in this water gives moſt light when it is moved.

In ſome parts of the ſea there are parcels of matter of different colours, ſometimes red, and ſometimes yellow, floating on the ſurface: it appears like the ſawings of wood, and the ſailors ſay it is the fry or ſeed

ſeed of a whale; of this however I cannot be certain. When water is drawn out of the ſea, in thoſe parts, it is found to be very viſcid. The ſailors alſo ſay that in the northern ſeas there are large ſhoals of the fry, which ſometimes appear quite luminous in the night time; even when not agitated by the motion of a ſhip or fiſh; of this however I cannot advance any thing upon my own knowledge.

To prove that the water is the more luminous in proportion to its viſcidity, the following experiment has been made. We one day catched a fiſh, which ſome took to be a bonite. The inſide of the throat of this fiſh in the night time appeared like a live coal; ſo that without any other light, a perſon could have read as well by it, as by the moſt luminous wake. The throat was full of a viſcid matter, with which when a bit of wood was ſmeared, it forthwith became luminous, but as ſoon as the matter was dried the light was extinguiſhed.

I have been lately informed that a learned phyſician at *Venice* a few years ago, diſcovered by the help of a microſcope, and proved the truth of his diſcovery at large in a printed work, that the luminous particles with which the *Adriatic* ſea is known ſo greatly to abound, as has been above remarked, are all living animals which ſhine like glow worms, although they are many hundred times ſmaller. For my own part, I think there is ſomething plauſible in this way of accounting for the phænomenon; and therefore I long for an opportunity of verifying the fact.

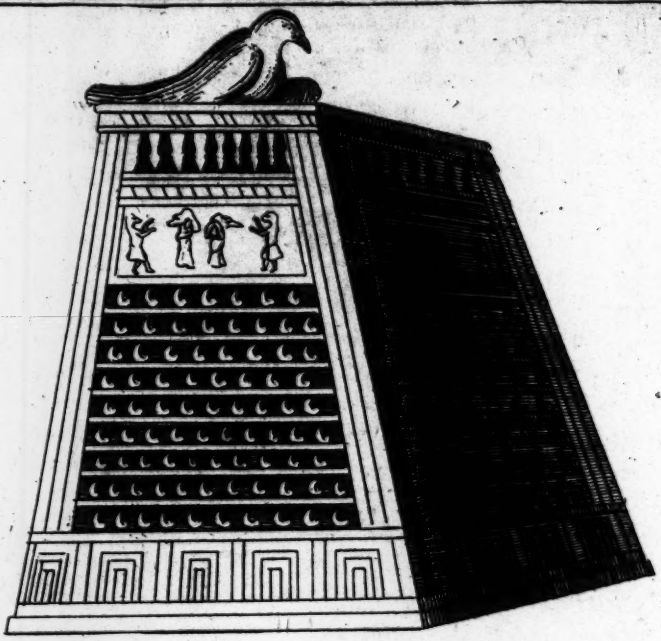
I ſhall add ſome obſervations on the *Iris* or rain-bow of the ſea. It is principally after violent tempeſts, that ſuch rain-bow appears with the greateſt ſplendor. The celeſtial or aereal rain-bow has indeed this advantage over the ſea iris, that its colours are more lively, diſtinct and various. In the ſea iris there are hardly more than two colours, a dark yellow towards the ſun, and a pale green on the oppoſite ſide; the other colours are not lively enough to be diſtinguiſhed. In recompence for this the ſea rain-bows are much more numerous, ſince at mid day we ſee twenty or thirty of them at a time, in a ſituation oppoſite to that of the celeſtial iris; that is, with their arches turned toward the ſea.

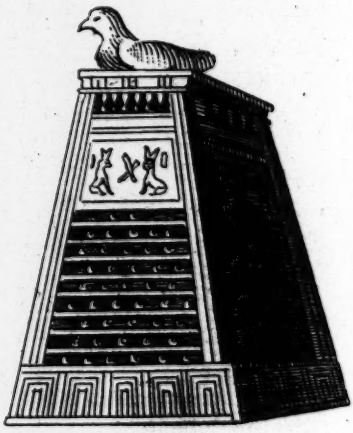
We ſometimes alſo ſee exhalations which being inflamed in the night time, form a ſtreak or glade of light in the air. Theſe exhalations in the *Indies* leave a much more extenſive glade than in *Europe*. Some of them look like real rockets; they appear very near the earth, and diffuſe a light as ſtrong as that of the moon three or four days old. Their fall is ſlow, and they deſcribe a curve line in falling.

Of the origin and formation of muſk, and the food of the animal which produces it. By Father ARDNT *a miſſionary in* China.

HITHERTO people have talked differently on the origin of muſk. Some writers pretend that it is formed in the navel of the animal; but they are certainly miſtaken, for it is in the bladder that it is formed. The

Engraved for the General Magazine, *for W. Owen, at Temple Bar.*





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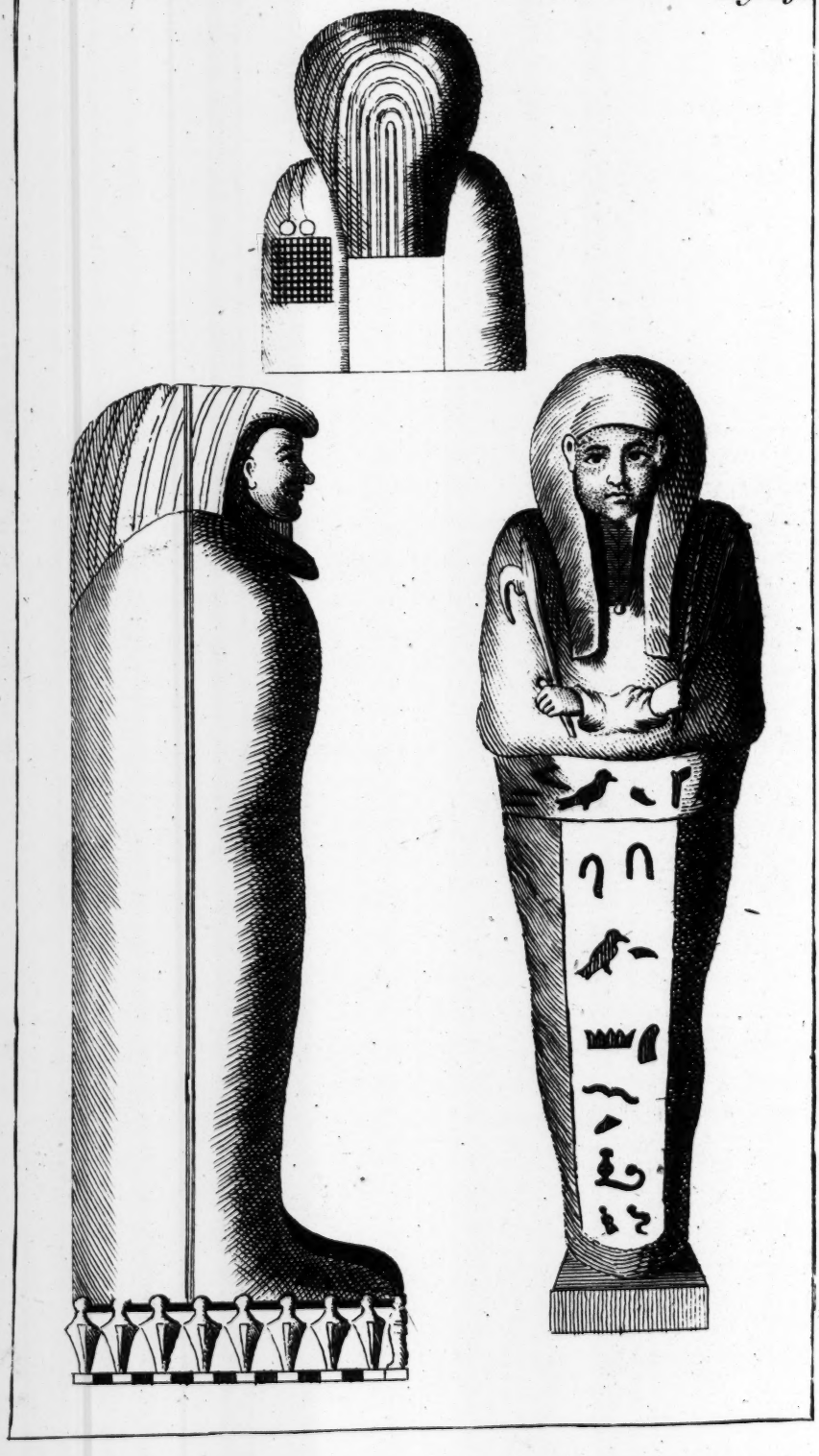


The muſk animal is a ſort of ſmall goat which the *Chineſe* call *hiang tchang-tſe*. *Tchang-tſe* ſignifies a goat, and *hiang* properly ſignifies odour.

On the eaſt of *Peking* is a long ridge of mountains, where there are great numbers of theſe muſk-goats. Thoſe who kill them ſometimes ſell the fleſh by itſelf, and diſpoſe of the muſk to thoſe who deal in it. They cut up the bladder of the creature, and tie it tight about the neck to prevent the muſk from evaporating, and when they would preſerve it for a curioſity, they dry it.

The muſk adheres to the internal coat of the bladder, ſomewhat in the form of a ſalt. That in grains is the moſt valuable, being called *tcheou-pan-hiang*; the other called *mi-hiang*, is leſs eſteemed, and of much ſmaller grains. The female bears no muſk, or at leaſt what in her reſembles that ſubſtance, has no ſmell.

Serpents are the moſt common food of theſe goats, and though ſuch ſerpents are of enormous bulk, yet the goats eaſily kill them; becauſe as a ſerpent is within a certain diſtance of a goat, the former is by the ſcent of the muſk ſo ſtupified, that it can move no more.

This is ſo commonly known for a truth, that the country people who gather wood for charcoal in the mountains, have no better prevention againſt the ſtings or bites of theſe ſerpents, which are very dangerous, than to carry a few grains of muſk about them. In this caſe they can ſleep ſecurely after dinner; for if any ſerpent ſhould come near them, it is forthwith laid aſleep by the ſmell of the muſk, and can go no further.

The Egyptian *manner of embalming human bodies, and birds.*

WHEN any man of conſequence died, all the women of the family beſmeared their hands and faces with dirt; left the body in the houſe, and, with other women, their relations, went about the city beating themſelves, with their garments girt about them, and their breaſts uncovered; the men alſo girded their garments about them and beat themſelves; afterwards they carried the body to be embalmed, there being certain perſons appointed for this buſineſs, who, when the body was brought to them, ſhewed ſeveral patterns made of wood, painted like a dead body embalmed. One of theſe patterns was of very fine workmanſhip, and called by a name it was not lawful commonly to utter; another was ſhewn, not ſo fine, and leſs coſtly; and a third ſtill cheaper. When the manner and price was agreed on, then they embalmed them in this manner: Firſt, they extracted the brains by the noſe, with a crooked iron, and then poured in drugs; afterwards they opened the body with a ſharp *Ethiopian* ſtone, took out the bowels, cleanſed the body, and waſhed it with palm wine, and a ſecond time with pounded perfumes; they then filled it with myrrh, caſſia, and other ſpices, frankincenſe excepted, and ſewed it up: afterwards they waſhed it with nitre, and laid it by for ſeventy days, for longer it was

not permitted to lie; they then waſhed the body again, and bound it up in ſwathes of linen, beſmearing it over with gums, which the *Egyptians* uſed inſtead of glue. The relations took it from them, and made a wooden figure of a man, in which they put the body, and fixing down the top, they put it into the *catacombs*. But thoſe who were more moderate in their expences, injected turpentine of cedar with a pipe into the body, without cutting it; they then ſalted it for ſeventy days, and drew out the pipe, which brought the bowels out with it by the fundament, and the nitre dried up the fleſh, leaving nothing but the ſkin and the bones. The third way of preparing the body, with thoſe of ſmall fortunes, was by cleanſing the inſide with ſalt and water, and ſalting it for ſeventy days.

The relations went mourning about the city 'till the body was buried; during that time, they uſed neither the baths, wine, delicate food, nor fine cloaths. The firſt manner of embalming coſt a talent of ſilver; the ſecond twenty *minæ*. The people of this profeſſion, of embalming bodies, learnt the art of their anceſtors; and their method was to bring in an account to the relations of the expences of the different ways of embalming the body, and aſking them which method they choſe; and, agreeing about every thing, they took away the body to be embalmed. Firſt, the ſecretary marked out on the left ſide, how far it ought to be cut; then a certain officer cut according to their rules, with an *Ethiopian* ſtone, and immediately ran away, all the people that are preſent following him, throwing ſtones after him, and curſing him, to atone for this fact; for they looked on the perſon as an object of hatred, who offered any violonce, wounds, or harm to the body of his fellow creature: but thoſe who embalmed the bodies, they honoured and eſteemed; and they converſed with the prieſts, and went into the temples (as the prieſts) without any reſtraint. Then one of them took out all the entrails, except the heart and kidneys. Another waſhed the inſide, and the bowels with palm wine, and aromatic perfumes; they then prepared the body with turpentine of cedar, and other things, for about thirty days, and afterwards with myrrh and cinnamon, not only to preſerve it, but to keep it ſweet. From what follows, one would imagine, that there was a way of preſerving the bodies far beyond that of wrapping them up in linen, and dipping them in bitumen, or beſmearing them with it, in the manner we ſee they were embalmed; for their very eye-brows and eye-laſhes, and the form and appearance of the whole body was ſo well preſerved, that they might be known by their features; and, on this account, many of the *Egyptians* kept the bodies of their anceſtors in houſes, adorned at a very great coſt, and had the pleaſure to ſee their fore-fathers, who were dead many years before they were born, and to obſerve all their features, as well as if they were living. From hence it is probable, that this manner of embalming was the fineſt and moſt coſtly, and thoſe whoſe bodies were prepared

prepared in this way might be ſet upright, that their friends might have the pleaſure to behold them in that natural poſture.

There were, doubtleſs, ſeveral ways of embalming bodies, which were more or leſs expenſive. It was obſerved of a mummy that was brought from *Egypt* in a coffin made of boards; that the chinks between the boards were filled up with linen and fine plaiſter. There were four folds of cloth over the head; the upper one being painted blue; under this there was a compoſition, about half an inch thick, of gum and cloth, that was burnt by the heat of things applied to it; and next to the ſkin there was a coat of gum, or bitumen, about as thick as a wafer, which ſeemed to have been cauſed by dipping the body in bitumen, and under this the ſkin ſeemed to be next to the ſkull. The head was half full of bitumen, that is, the hinder part, the body having been laid on the back, when the bitumen was poured in by the noſe. It is very remarkable, that the bitumen had penetrated into the very bone of the ſkull, eſpecially into the middle of it, which is moſt porous, though there is little or nothing to be ſeen of it on the outer tables of the bones. The body was bound round with a bandage made of linen, about three quarters of an inch broad, under which there were four folds of cloth, and then a ſwathe two inches broad, and under that eight different bandages of the ſame breadth, laid a-croſs from the ſhoulders to the hips on the other ſide. Under this there was a cruſt of linen about an inch thick, burnt almoſt to aſhes, but ſticking together by means of the gums with which it was probably beſmeared. The bones of the arms were laid a-croſs the breaſt; the right arm being over the left, and the hand lying towards the face. From the hips to the feet there were eight bandages two inches broad, one covering about half of the other; under theſe there were bandages an inch thick, conſumed by the heat of the drugs. There were two wooden blocks, on which the head of the mummy reſted. The outer bandages, of linen, did not ſeem to have been beſmeared with gums. The coffins they put the bodies in are of two ſorts. One has the lower part made of an entire piece of wood, and the upper part of another, both hallowed in ſo as to receive the body, and being put together, they are faſtened with broad pegs in the top, that are fixed into holes in the lower part. They were cut into the ſhape of a human body, as bound up after it is embalmed; and the coffins, and likewiſe the bodies wrapt up in linen, were covered over with a thin plaiſter, and painted according to the pattern they fixed on. As to the manner of painting the mummies and coffins, it may be obſerved, both on their coffins and bodies, that they firſt painted the ground of one colour, and then, probably, laying on a cloth or paſteboard cut out like figures in cut paper, they painted the open or uncovered ſpaces; for the figures appear moſtly of one colour, probably that of the ground, and the paint riſes higher round the figure.

As to embalming of birds, it appears that they were put into a ſort of pot in the form of a ſugar-loaf, wrapt up in ſeveral folds of linen; the

outermoſt being ſewed together, and the ſecond bound round with thread: under this there were above twenty folds of linen, and probably ſeveral more under them, which were burnt to a coal by the aromatic drugs and melted bitumen they were very likely dipped into, or beſmeared with. [*See the plates.*]

An account of the catacombs.

The entrace to the catacombs of the mummies is by a well about four feet ſquare, and twenty deep, cut through the ſlaty rock, which has a mixture of talc in it; the upper part is ſand, which is often moved by the wind, and fills up the holes. Some of theſe wells are caſed with unburnt brick at the top as far as the depth of the ſand. There are holes on each ſide to deſcend by, and the way is then by a paſſage five feet wide and about fifty long, which is almoſt filled up with ſand. There is then a paſſage of the ſame ſize, and about ſix feet high; on one ſide are apartments with benches about two feet above the paſſage; and on theſe very likely the *Egyptians* uſed to lay their mummies. On the other ſide are narrow cells juſt big enough to receive a large coffin. About two feet from the ground, in the middle of them, the rock projects, and is about half a foot wide. By this alley there is another narrower, on each ſide of which are niches, which ſeem to be deſigned to ſet coffins in upright. From theſe paſſages there are cut oblong ſquare apartments which are full of the remains of mummies; and very likely here the inferior perſons of a family were depoſited, piled up one on another; as we may ſuppoſe the heads of the family were ſet upright in the nitches, which appear to have been walled up, as well as all the other apartments; and ſometimes walls were built acroſs the paſſages. It is probable each family originally had its burial place, and as the family increaſed, they branched out theſe ſepulchral grotts, ſo as that every deſcendant might have a place apart for his family. Several of the ſwathings here lie about, and ſome remain almoſt entire, only the bodies are taken out from the middle for the ſake of the mummy. There are alſo many ſkulls here, as well as on the plain beyond; many of which may be, have been rifled of the bitumen or balſam that was in them. There are alſo ſeveral large earthen vaſes; in them is a black fat earth, which makes one imagine that the bowels might be preſerved in them.

The entrance to the catacomb of the birds is the ſame as the other, excepting that it is about thirty feet deep; the paſſage from it is almoſt full of ſand and about eight feet wide. Theſe catacombs are much more magnificent than the others, being the ſepulchres of thoſe birds and other animals the *Egyptians* worſhipped: for when they found them dead, they embalmed them with the ſame care as they did human bodies, and depoſited them in earthen vaſes covered over and ſtopped up with mortar. In one of the irregular apartments there are ſeveral large jarrs, which might be for dogs or other animals, of which ſome have been found, but are now very rare.

O

On the pernicious cuſtom of drinking ſpiritous liquors in a morning.

TO tipple liquors upon an empty ſtomach deſtroys the appetite, hurts concoction, diſturbs the ſecretions, and ſo produces ſchirrous tumours, the ſcurvy, jaundice, and dropſies.

After it has done its miſchiefs in the ſtomach it begins in the bowels, and there occaſions fluxes, cholic pains, the iliac paſſion, dyſenteries, and hypochondriacal humours.

After ſo many miſchiefs from the drinking ſpiritous liquors in a morning, in the firſt paſſages it very often raiſes the blood into a ferment, by which means it brings fevers, inflammations, phrenſy, and apoplexies which take a perſon off upon the firſt attack. Sometimes it preys upon the blood, and robs it of its ſpirits, whence ariſe conſumptions, cachexies, loſs of ſtrength, and faintings.

To fill the veins with ſpirituous liquors is particularly injurious to the breaſt, cauſing aſthmas, pleuriſies, peripneumony, and phthiſic; ſpitting of blood ſeems to be its natural conſequence.

But theſe miſchiefs go ſtill further, and threaten the nerves themſelves; for ſpaſms, tremors, palſies, convulſions, and epilepſies frequently ſeize upon thoſe who are guilty of this folly.

Laſtly, weakneſs of the limbs, the gout, pains in the knees and arms, together with rheumatiſms, are reckoned among the ſlighter diſorders which are brought about by this cuſtom.

All theſe maladies do not happen to all perſons, but there are none but what meet with ſome of them. Evenings intemperance will be the ſame, only with this difference, that drinking in a morning will diſeaſe and kill a perſon ſooner.

This cuſtom does not only bring on all thoſe diſeaſes, but, which is worſt of all, prevents all means of recovery from them: for as ſoon as the ſlighteſt diſorder ariſes, and the patient is obliged to forbear his beloved bottle, his ſpirits will be ſunk ſo much as not to be raiſed by the ſtrongeſt and moſt generous cordials; not ſo much from the ſeverity of the diſeaſe, as from his preceding loſs of ſtrength.

How prepoſterous is that intemperance, which makes it neceſſary that the more we drink the more we are thirſty? the more we accuſtom ourſelves to ſpirituous liquors, the more we want ſpirits; the more we uſe hot things, the more we grow cold; and ſo make all things run counter to the order of nature.—The plea in excuſe for this cuſtom is, that it creates an appetite: but it is time to ſhew the folly of ſuch a plea; for let it only be obſerved that they enjoy the beſt of appetites who make no uſe of drams or whets: ſober men have for the moſt part the beſt ſtomachs. When a young gentleman of my acquaintance, who has lately given into this practice of morning tipling (and now pleads this excuſe) was with me in the college, and lived in that temperance as is cuſtomary there, his ſtomach was by no means bad, but ſuch as often diverted his thoughts into the kitchen. But as ſoon as he came to *London*, and fell into this deſtructive practice, how prodigiouſly was he changed? The very mention of meat now nauſeates him,

and

and he eats ſo little as hardly to be perceivable; to himſelf therefore I appeal, whether the cauſe of ſuch a loſs of appetite can with any colour of reaſon be thought a proper means of recovering it?—If an appetite is wanted, EXERCISE is the beſt reſtorative.

Explanation of the following Table.

IN this table may be ſeen all the different meaſures by which quantities of land are calculated; and how often one is contained in another, either in long or ſquare meaſure; and this by the plaineſt, eaſieſt, and moſt intelligible method.

Having found the two titles, the eye is to be directed in a ſtrait line till the two lines meet in one center: in one way it diſcovers the number of the leſſer meaſure in the greater, in long meaſure; in the other way, in ſquare meaſure: thus, for example.

In a *mile* long there are 1760 *yards*.

In a *mile* ſquare there are 3,097,600 ſquare *yards*.

Nothing can be more ſimple than this method, as may be very apparent from the ſlighteſt attention to the table; and it cannot fail being very uſeful in the admeaſurement of land, as it will ſerve by way of artificial memory, and greatly abridge the calculations.

Square						Long				
Inch	7.92	12	36	60	198	792	7920	7920	63360	
62.726	Link	1.515	4.56	7.575	25	100	1000	1000	8000	
144	2.295	Foot	3	5	16.5	66	660	660	5280	
1296	20.755	9	Yard	1.66	5.5	22	220	220	1760	
3600	57.381	25	2.778	Pace	3.3	13.2	132	132	1056	
39204	625	272.25	30.25	10.89	Pole	4	40	40	320	
627264	10000	4356	484	174.24	16	Chain	10	10	80	
1 5631 60	25000	10890	1210	435.6	40	2.5	Rood	1	8	
6272640	100000	43560	4840	17424	160	10	4	Acre	8	
40154896 00	64000000	27878400	3097600	1115139	102400	6400	2560	640	Mile	

A method to make a very good lacque, or varniſh, in a letter from Paris.

THERE are three ſorts of lacque: the fine *Venice* lacque, the columbine lacque, and the liquid lacque. The firſt, notwithſtanding its name, is made at Paris: there are different methods of making it, but all troubleſome, and very expenſive; the ſame may be ſaid reſpecting the making the other two lacques. The following proceſs is much more ſimple, and yields, at a ſmaller expence, a very fine varniſh. Take a very clear lye of pot-aſh, or tartar, add to it a very ſmall quantity of a ſolution of alum; put the lye into a very large glaſs veſſel; take ſome powdered cochineal, which muſt be carefully ſewed into a linen bag, which ſtir about in the lye till no colour remains in it. That which is firſt extracted is beſt, and may be kept in a ſeparate glaſs. When the colour is all extracted, take ſome very clean alum-water, which pour on the lye, till the whole is curdled; it muſt then be filtered, and the varniſh purified.

A

about Noon, the Second its least Height in the open Air, from 10 to 12 at Night. In April, and the following Months, the 1st Number is the greatest Height in the Shade in open Air; the 2d Number as before. The Winter was uncommonly cold for that Country. Summer, moist and cloudy.

	Nov. 1762.		Dec.		Jan. 1763.		Feb.		Mar.		April.		May		June.		July.		Auguſt		Sept.		Oct. 1763.	
	Noon	Night									Noon	Night												
1	44	38	47	36	35	2	28	28	42	32	44	27	47	37	73	55	71	51	79	61	78	57	66	53
2	52	50	44	32	16	15	34	28	38	22	34	19	57	35	70	51	87	60	84	59	76	58	77	51
3	60	48	31	26	31	34	35	34	32	19	40	26	47	37	71	50	81	61	66	60	79	62	55	38
4	44	38	35	30	23	37	29	9	34	34	36	32	53	38	72	52	71	55	85	63	75	62	65	49
5	50	28	41	22	32	27	15	9	42	39	48	40	61	34	73	51	68	53	74	57	77	60	69	60
6	50	36	20	8	16	1	21	21	44	16	54	35	57	37	64	49	85	58	74	53	75	60	68	51
7	48	38	20	33	11	3	30	16	31	10	33	20	62	40	70	52	75	57	70	57	76	58	66	47
8	50	44	15	33	18	6	29	23	25	19	38	29	71	46	82	50	69	57	77	56	75	63	63	42
9	50	43	35	29	33	34	29	20	33	34	38	31	73	44	76	48	71	53	75	60	68	47	56	47
10	50	40	43	30	33	16	24	5	42	29	34	29	74	49	85	63	66	56	88	67	59	43	75	56
11	53	42	44	27	16	3	17	25	35	25	44	25	62	45	75	53	71	57	85	65	71	59	72	48
12	52	41	40	39	12	5	30	23	36	22	42	34	66	40	77	51	74	56	81	64	75	60	64	46
13	48	37	54	40	36	8	35	25	34	24	36	29	67	41	61	52	80	62	87	67	71	52	53	40
14	48	33	45	33	15	7	39	32	35	27	51	39	62	43	69	50	80	57	87½	68	74	52	65	52
15	49	36	39	33	30	37	40	31	36	29	62	34	50	42	53	50	75	58	88½	67	77	60	62	
16	52	33	34	21	23	10	35	31	40	32	40	39	49	37	57	53	78	58	85	67	68	54		
17	47	30	30	29	15	4	38	29	41	27	44	36	44	44	77	52	74	56	85	61	61	43	At sea	
18	40	27	48	31	18	17	35	28	21	6	62	37	59	50	75	54	69	56	82	65	71	54	55	
19	45	36	35	19	25	15	38	28	17	10	41	34	61	40	64	46	80	60	82	61	70	60		
20	46	38	30	18	29	15	36	28	34	34	45	30	61	40	72	50	82	60	83	61	77	58		
21	60	39	35	25	35	37	33	24	48	18	46	36	48	41	62	55	83	61	82	60	74	55		
22	55	48	40	38	34	1	33	30	8	13	50	32	61	42	74	53	77	63	83	59	69	52		
23	51	42	34	27	11	9	39	2	29	23	41	33	56	53	73	51	80	57	77	59	66	45	63	
24	48	33	32	25	21	10	18	1	36	21	45	36	65	48	77	51	85	58	77	62	59	46	62	
25	43	37	31	36	23	16	15	0	37	28	46	39	61	48	71	55	77	63	78	58	56	39		
26	35	30	29	0-1	24	15	19	2	34	29	57	44	62	46	70	62	77	63½	74	59	61	52		
27	32	25	5	0-5	25	17	17	9	39	27	59	41	61	40	82	59	73	63½	79	59	75	61		
28	38	30	11	24	26	8	26	27	36	25	52	36	55	39	77	63	82	64	84	63	68	46		
29	43	32	35	32	26	17			44	31	52	35	53	46	68	62	83	64	70	65	66	44	70	
30	46	44	38	28	26	13			37	35	55	36	54	42	86	64	79	62	77	62	74	56		
31			35	32	25	17			46	37			73	49			76	60	80	60			75	
									Middle Heat		39·38		50.69		62.71		67.72		70.7		62.31			

January. February. March. 1763. the first Number gives its greatest Height in a Passage

At Annapolis Royal *in* Nova Scotia.
In the open Air.

	Oct. 1762	Nov.		Decemb.		Jan. 1763.		Feb.		Mar.	
	Noon	Noon	Night	Noon	Night						
1	53	47		44	41	26	12	33	27	39	31
2	60	48		39	37	23	12	34	30	32	31
3	60	49		30	30	35	25	35	25	33	21
4	57	48		30½	30½	37	33	22	9	36	35
5	62	42		32	27	32	20	14	13	38	39
6	59	39		15	15	13	7	23	20	38	25
7	55	35		16	21	13	13	33	14	29	23
8	59	34		33	30	29	14	27	25	23	20
9	58	33		32	31	37	33	29	20	43	33
10	62	35		34	37	25	22	14	9	33	28
11	63	37		37	33	11	10	25	23	34	28
12	60	38		39	40	12	15	32	26	37	25
13	58½	39		44	42	33	15	35	26	33	27
14	57	40		41	39	14	13	35	25	32	26
15	56	39		39	35	37	38	35	22	38	30
16	55½	40		30½	25	14	12	32	30	36	32
17	59	41		27	30	20	11	35	29	38	25
18	54	40		42	32	16	19	36	22	13	11
19	55	42		33	22	20	17	33	25	16	24
20	58	40		29	25	25	24	40	23	36	36
21	61	41		32	29	37	33	35	29	38	11
22	60	41		33	39	9	4	35	23	14	16
23	57	40		30½	26	15	13	29	12	20	28
24	52	39		31	27	20	24	19	10	33	25
25	56½	39½		29	25	29	18	15	9	37	30
26	57	35		20	9	25	29	16	13	34	31
27	52	30½		10	12	24	3	28	17	33	29
28	50	33	34	27	15	33	5	29	33	36	32
29	50	34½	36	36	32	35	15			38	32
30	49	41	43	28	28	29	6			38	35
31	47			34	34	28	13			34	31

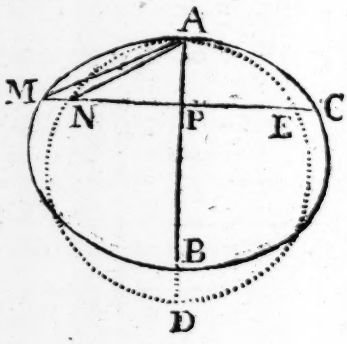
MATHEMATICAL CORRESPONDENCE.

A PROBLEM, *with its* SOLUTION, *concerning the ſolid of greateſt attraction.* *By Mr.* T. Allen, *of* Spalding, Lincolnſhire.

PROBLEM.

TO find the area of the curve, which, revolving about its axis, ſhall generate the *ſolid of greateſt attraction*, ſuppoſing its force to act on a corpuſcle placed on its ſurface; alſo the content of the ſaid ſolid, and the ratio of its attraction to that of a ſphere of the ſame quantity of homogeneous matter, taking the axis of the ſolid = the invariable quantity g. (*See* Gen. Mag. of Arts and Sciences *for* Jan. 1764, P. 33.).

SOLUTION.



LET AMBC repreſent the required ſolid. Put AB = g, AP = x, AM = z, and let c = 3.1416.

Then for the area of curve AMB. From the given Equation $z^3 = g^2 x$, we have $x = \frac{z^3}{g^2}$, and therefore, $\frac{1}{g^2} \times \sqrt{g^4 - z^4} \times z = PM$. Moreover, $\dot{x} = \frac{3z^2 \dot{z}}{g^2}$, and conſequently $\frac{3}{g^4}\sqrt{g^4 - z^4} \times z^3 \dot{z}$ is the fluxion of the area, whoſe corrected fluent is $\frac{1}{2g^4} \times \overline{g^6 - \overline{g^4 - z^4}^{\frac{3}{2}}}$, which when $z = g$, becomes $\frac{1}{2}g^2$, the area of the curve AMB, required.

For the content of the required Solid.

From what is given above, we have $\overline{PM}^2 = \frac{1}{g^4} \times \overline{g^4 - z^4} \times z^2$; therefore the fluxion of the ſolid will be $\frac{3c}{g^6} \times g^4 z^4 \dot{z} - z^8 \dot{z}$, whoſe fluent is $\frac{3c}{g^6} \times \frac{\overline{g^4 z^5}}{5} - \frac{\overline{z^9}}{9}$, which, when $z = g$, becomes $\frac{4g^3 c}{15}$, for the content of the ſolid AMBC.

To find the force of attraction, &c.

The force of attraction of the circle MPC will be, as $1 - \frac{\dot{x}}{z}$ (*Simpſon*'s Fluxions, art. 375. or *Emerſon*'s Fluxions, 2 ed. p. 367.) Or as $1 - \frac{x^{\frac{2}{3}}}{g^{\frac{2}{3}}}$ by the Equation of the curve, and therefore $\dot{x} - \frac{x^{\frac{2}{3}} \dot{x}}{g^{\frac{2}{3}}}$ as the fluxion of the force of the ſolid, whoſe fluent is $x - \frac{3x^{\frac{5}{3}}}{5g^{\frac{2}{3}}}$, which when $x = g$, becomes $\frac{2g}{5}$ for the attraction of the whole ſolid.

Let a = the diameter of the ſphere AND E equal to the ſolid AMBC, then will the fluxion of the force of the ſphere be as $\dot{x} - \frac{x\dot{x}}{\sqrt{ax}}$, and the fluent $x - \frac{2x^{\frac{3}{2}}}{3\sqrt{a}}$, and the force of the whole ſphere, as $\frac{1}{3}a$. Moreover, the content of the ſphere is $\frac{ca^3}{6}$. Therefore $\frac{4g^3 c}{15} = \frac{ca^3}{6}$, where $a = g \times \overline{1.6}^{\frac{1}{3}}$. Whence, the force of the ſolid to that of the ſphere, is as $\frac{2g}{5}$ to $\frac{a}{3}$, or as $\frac{2g}{5}$ to $\frac{g}{3} \times \overline{1,6}^{\frac{1}{3}}$, that is, as 4000 to 3899 nearly.

Queſt.

Queſt. 1. *anſwered by Mr.* T. Barker, *the Propoſer.*

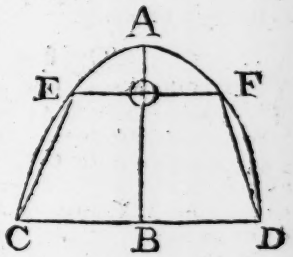
FIRST $0.7854\,x^{\frac{39}{26}} = x^{\dot{x}^2}$, *per* queſtion. —— Put $a = \frac{1}{0.7854}$, $P = \frac{39}{26}$, $c = \frac{2}{7}$, X = Logarithm of x, and A = Logarithm of a; then $PX = A + Xx^c$. Solved gives $x = 8.3915$ Inches; therefore the depth of the glaſs was 4.93, and diameter of its brim 3.5835; whence 49.723674 cubic inches = 1.41 pint, ale meaſure.

N. B. *This gentleman not having made a ſufficient diſtinction between the figures* 2 *and* 3 *in his writing, was the occaſion of his queſtion being wrong printed, the content being* $x^{\dot{x}^{\frac{2}{7}}}$ *inſtead of* $x^{\dot{x}^{\frac{3}{7}}}$.

The method of ſolving this problem was likewiſe given by Mr. T. Walker, *and Mr.* G. R.

Queſt. 2. *anſwered by Mr.* T. Walker.

LET $b = 25872$; $c = 3,1416$; a (*per* queſtion) = 4,096; then $ax^5 - y^7$; therefore $a^2x^{10} = y^{14}$; and $a^{\frac{2}{7}}x^{\frac{10}{7}} = y^2$; *per* the doctrine of fluxions, $ca^{\frac{2}{7}}x^{\frac{10}{7}}\dot{x}$ = Fluxion of the ſolid; whoſe fluent is $\frac{c \times a^{\frac{2}{7}} \times x^{\frac{10}{7}+1}}{\frac{10}{7}+1} = b$; reduced $x^{\frac{17}{7}} = 13370,54$, hence $x = 50$, and $y = 20$.

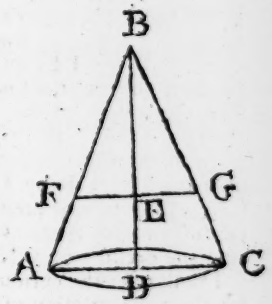


For the greateſt inſcribed conic fruſtum, put $AO = z7$; and $d = ,7854$; then, by the nature of the curve, $x^5 : y^7 :: z^{35} : \frac{y^7}{x^5} \times z^{35} = az^{35} = \overline{EO}^2$; therefore $a^{\frac{1}{7}}z^5 = EO$; now, *per* queſtion, $2a^{\frac{1}{7}}yz5 = \overline{2bz5y + 4y^2 + b^2z^{10}} \times \frac{d}{3} \times \overline{x - z^7} =$ a maximum; fluxed and reduced $10bxy + 10b^2xz5 - 24byz7 - 28y^2z^2 - 17b^2z^{12} = 0$; in numbers $24460 + 3000z^5 - 1174z^7 - 11200z^2 - 102z^{12} = 0$; divide by the co-efficient of the higheſt power, and by converging ſeries $z = 1,392$ nearly; whence $z7 = 10$; and $EF = 12,67$. Hence the ſolid muſt be cut at $\frac{4}{5}$ of its height from the baſe.

The ſame anſwer is given to this queſtion by Mr. T. Barker, *and Mr.* J. Barber, *the propoſer.*

Queſt. 3. *anſwered by Mr.* G. Cetii.

THE ſolidity of the given cone being 1340,416, the content of the leſſer part, or (*per* queſtion) $\frac{1}{3}$ part of the whole muſt be 446,8008, which put $= s$, $a = 8$, $= AD$, $b = 20$, $= BD$, and $r = ,7854$; alſo let $x = FE$. Then, $a : b :: x : \frac{bx}{a}$, $= BE$; but $4rx\dot{x} \times \frac{bx}{3a} = s$; this equation properly ordered is $x = \sqrt[3]{\frac{3as}{4br}} = 5,546$; whence $BE = 13,866$.



This queſtion was alſo ſolved by Meſſrs. Todd, Barker, Dalby, Bernardin, Tarratt, Mountfort, Turner, Smith, Walker *the propoſer*, Sewell, Gowing, G. R. *and* Sadler. *Several of the above mentioned gentlemen obſerve, that this queſtion admits of two anſwers, as the propoſer does not mention which of the two parts is to be leaſt; and Mr.* Dalby *ſubjoins the following remark,* "That it amounts to no more than this, viz. in a given cone it is required to cut off (by a plane parallel to its baſe) $\frac{1}{3}$ of its Solidity, which is no new queſtion, and very eaſily done."

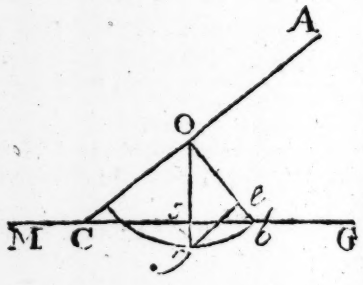
Queſt. 4. *anſwered by Mr.* Iſaac Dalby.

FROM the ſecond equation, we have $x^2 = 25 + y + z$; now as y, nor z, muſt not exceed 24; it follows, that x muſt not exceed 8; and as y, nor z cannot be leſs than 1, x cannot be leſs than 6; which are the limits of x. Find all the poſſible values of y and z, when x is $= 6$, 7, and 8. Then from the third equation, *viz.* $\frac{xyz}{x^2} = 3{,}2857$, or $\frac{yz}{x} = 3{,}2857$ it is evident that yz muſt exceed 3 times x, but not equal 4 times x; whence, by looking at all the poſſible values of y and z, it appears at firſt ſight, that 1, and 23 are the values of y and z; and $x = 7$; whence the poet's name is GAY.

The ſame anſwer, though by a different method, is brought out by Meſſrs. Harlock, Sewell, Barker, Tarratt, Mountfort, Smith, Waugh, Walker, Barber, G.R. *and* Sadler, *the propoſer.*

The ſame misfortune attended this queſtion which happened to the 1ſt, the propoſer making the radical ſign ſo large that it was ſuppoſed to include the whole fraction, whereas it ought to have affected only the numerator. We hope our ingenious contributors will be careful for the future, as we always print from their own copy to avoid miſtakes, which might ſometimes happen by tranſcribing.

Queſt. 5. *anſwered by Mr.* Todd, *the propoſer.*

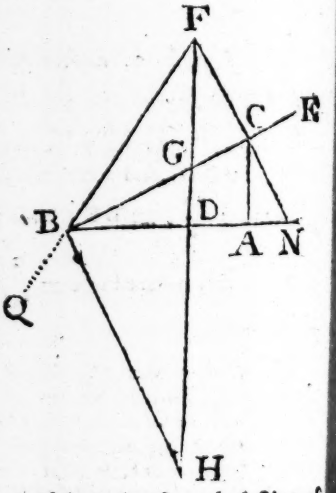


FROM the nature of the problem, is is evident, that the timber CA, will gravitate in a direction perpendicular thereto; and therefore, the prop ob, perpendicular to CA, will be a direct force ſupporting the timber at o; and if the prop os be continued to g, ſo that og may $= ob$; then will og be an oblique force for the ſame purpoſe; but the force go, muſt be reſolved into the forces ge parallel to CA, and eo perpendicular to CA, and conſequently, eo is that force reſulting from go, which oppoſes the timber at o; but theſe forces will be as the preſſures, and therefore we ſhall have $ob + oe : w :: ob : \frac{ob}{ob+oe} \times w =$ preſſure ſupported by the prop ob, and $ob + oe : w :: oe : \frac{oe}{ob+oe} \times w =$ ditto, ſupported by the prop os.

Corollary. In the preſent poſition of the props, os is $= oe$.

The ſame anſwered by Mr. T. Walker.

CONSTRUCTION.



IN the figure, G repreſents the center of gravity of the beam BE; produce NC (the prop perpendicular to the beam) to meet the line of gravity produced, in F; join FB, and draw BH perpendicular to the beam to meet the line of gravity produced to H; then the weight of the whole beam BE, will be expreſſed by FH; the preſſure in direction CN, by BH; preſſure in direction FQ by FB; the perpendicular preſſure at B by FD; and in direction DA by BD. The force or preſſure on CA, is determined by ſubduction only; or, as coſine of the elevation of BE, after the preſſure on CN is taken from it.

I ſhall refer the curious to Mr. *Emerſon*'s mechanics, for the demonſtration of this, and ſeveral other caſes, concerning the quantity, and direction of the preſſure of beams of timber, by their weight, and the forces neceſſary to ſuſtain them.

Note. The gentleman who propoſed this queſtion, would not have had occaſion to trouble the public for a ſolution, had he conſidered, with attention, the five propoſitions in the 7th ſection of *Emerſon's*

Emerſon's mechanics, 2d edition, where the very ſame caſe is largely treated upon, but I preſume he has not had an opportunity of ſeeing that excellent author.

Thus we ſee the conſequence of perſons not reading proper books of mechanics, ſtarting difficulties, which have already been handled in the plaineſt manner! falling very little ſhort of a piracy. *T. Walker.*

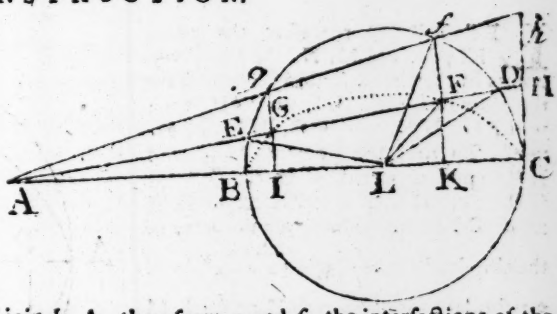
We have alſo received a ſolution to this queſtion from Mr. David Waugh.

*** *Mr.* Walker *informs us, that* "he has particular reaſons for deſiring us to inſert the above remark:" *We hope (for his own ſake) that thoſe reaſons are founded on nothing but truth and juſtice; as the impartiality which we profeſs, will oblige us to allow Mr.* Todd *the ſame liberty with reſpect to any ſtrictures he ſhall think proper to make upon it.*

Queſt. 6. *anſwered by Mr.* G. Witchell, *the propoſer.*

CONSTRUCTION.

LET B C be the tranſverſe diameter of the given ellipſis, and B E D C its circumſcribing circle; through D, E, the two given points, draw the line D E, producing it (if neceſſary) 'till it meets C B (produced alſo) in A; at any point (C) of the line A C, erect the perpendicular C H, meeting, the right line, A H in H; in C H, produced, take C *b* to C H, in the ratio of the greater axis of the given ellipſis, to the leſſer, and join *b*, A, then from *g* and *f*, the interſections of the right line A *b*, with the circle B E D C, draw *g* I, and *f* K, perpendicular to A C, interſecting A H, in G and F, then ſhall E G, and F D, be the required ſegments.



DEMONSTRATION.

The lines *g* I, *f* K, and *b* C, being parallel to each other, it follows (from ſimilar triangles) that the ratio of *g* I to G I, and of *f* K to F K, will be the ſame as the ratio of *b* C to H C; that is (by conſtruction) as the ratio of the greater axis of the given ellipſis to the leſſer, therefore (by conics) the points F and G, will be in the periphery of the given ellipſis B G F C, *Q. E. D.*

CALCULATION.

The angles D L C and E L B, being given (by the queſtion) we ſhall have the angle $DAL = \frac{DLC - ELB}{2}$; therefore in the triangle A D L, there is given all the angles, together with the ſide D L, from which A L becomes known; but the tangent of the angle F A K, is to the tangent of the angle *f* A K, as F K to *f* K, that is, as the leſſer axis of the given ellipſis, is to the greater; whence in the triangle A *f* L there is given the angle *f* A L, together with the ſides A L, L *f*, by which the angle A *f* L will be found; but the ſum of the angles *f* A L, A *f* L, is equal to the angle *f* L K, and the tangent of the angle *f* L K, will be to the tangent of the angle F L K, as *f* K to F K, that is as the greater axis of the given ellipſis, is to the leſſer, therefore the angle F L K will be known, from which, taking the given angle D L C, there will remain the angle F L D; but *f* L is to F L, as the ſecant of the angle *f* L K, is to the ſecant of the angle F L K (or, which amounts to the ſame, reciprocally as their co-ſines) therefore F L will become known; laſtly, in the triangle F L D, there is given, the two ſides F L, D L, with the included angle F L D; whence F D will be eaſily found: and by a ſimilar proceſs, E G may be determined.

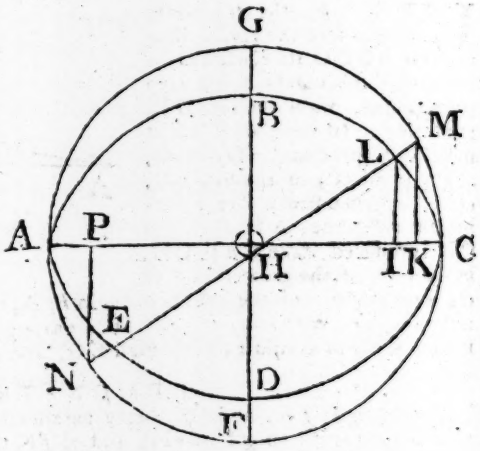
Corollary 1ſt.

Hence if D, repreſent a given place on the ſurface of the earth, conſidered as a ſphere, and the right line A H be ſuppoſed to be the axis of the moon's ſhadow (in a ſolar eclipſe) falling on the place D in a given direction, the ſolution of this problem, affords a method of determining the poſition of the place F, on the ſurface of a ſpheroid (whoſe ſection is the ellipſis B G F C,) where the eclipſe will be central at the ſame inſtant of time: and by the help of this problem, I conſtructed the map of the enſuing eclipſe, which lately publiſhed.

Corollary 2d.

If the body of any primary planet, ſhould deviate ſo far from a ſphere, as to affect the form of his ſhadow, the curve of the ſection of the ſhadow (made by a plane perpendicular to its axis) at a ſmall diſtance from the primary, will not be ſenſibly different from an ellipſis; and, by the means of this problem, we may determine the duration of an eclipſe of a ſatellite, paſſing through ſuch a ſection of the ſhadow. ——— That excellent aſtronomer, Dr. *Bevis*, was the firſt perſon who ſuſpected that ſome irregularities, obſerved in the eclipſes of *Jupiter*'s ſatellities, reſulted from this cauſe; this he mentioned to me, in a converſation upon that ſubject, about three years ago; and ſome time after, I preſented to him a paper, containing a general inveſtigation of the nature of the curve, which ariſes from the ſection of ſuch a ſhadow. This is the paper mentioned by M. *de la Lande*; *vide Connoiſſance des mouvemens celeſtes, pour l'annee* 1765, p. 177.

The ſame anſwered by Mr. David Waugh, *Teacher of the Mathematics at* Portſmouth.



LET ABCD repreſent the given Ellipſis, and M, N, the two given points in the circumſcribing circle, draw the ordinates MK, LI, and NP, then will PH, HN, and HK, HM, be given. To find the ſegments ML, and NE, put $OA = OC = t$, $OB = OD = c$, $HC = a$, $HK = b$, $KM = d$, $CI = x$. Then, *per* property of the ellipſis, $IL = \frac{c}{t}\sqrt{2tx - x^2}$, and *per* ſimilar triangles, as $HK = b : KM = d :: HI = a - x : IL = \frac{c}{t}\sqrt{2tx - x^2}$; therefore $td \times \overline{a - x} = bc\sqrt{2tx - x^2}$, from which equation the value of x may be eaſily found, and in conſequence of that the ſegment ML may be found alſo: and according to the ſame method of reaſoning, the other ſegment NE may be found.

Algebraical ſolutions to this queſtion have been received from Meſſrs. Cetii, Barnardin, Walker, Sadler, *and* Todd.

New QUESTIONS *to be anſwered.*

Queſt. 11. *By Mr* J Barber, *Teacher of the Mathematics at* Saxmundham *in* Suffolk.

GIven the rectangle of the ſines of two arches $= a$, and the rectangle of the ſine of three times the leſſer arch, into the co-ſine of four times the greater $=$ a maximum. Query the arches?

Queſt. 12. *By Mr.* John Hyde, *of* Redborough *in* Glouceſterſhire.

SUppoſe a voluble body let fall from the ſummit of a hill, whoſe ſlant and perpendicular heights, are 200 and 100 yards reſpectively, and it was obſtructed in its deſcent by a ſtone (or other obſtacle) poſited thereon; and 'twas obſerved, that from the commencement of the body's motion 'till the ſound's return, ſeven ſeconds had elapſed. I would know, from the data, the ſtone's diſtance from the vertex of the hill, and alſo, the time the ſound was moving over the required ſpace?

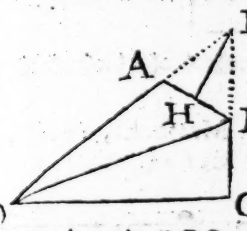
Queſt. 13. *By Mr.* John Thompſon, *of* Witherley-bridge, Northamptonſhire.

BEing employed in a ſurvey, I met with a mountain whoſe ſide was inacceſſible. Having only an arch divided into links, I proceeded as follows. In an hori-

zonta

zontal plain, at the bottom of the hill, I found 2 links muſt be taken out of each chain in the hypothenuſe; then meaſuring to the foot of the hill 6 chains 40 links, I found 20 links muſt be taken from each chain of the hypothenuſe to reduce it to a level. Required, without trigonometry, the horizontal line and height of the mountain, by theorems that may be of uſe to the practical Surveyor?

Queſt. 14. *By Mr.* Thomas Barker, *of* Wiſſett, *in* Suffolk.



GIven the Sum of AB + CD = 54.3104, $\overline{BD}^2$ = 1796; the angle DAB = ABC, angle C = 90°, and angle ADC = 36° 52′ 12″. Query the ſides and area of the trapezium ABCD?

Queſt. 15 *By Mr.* Thomas Todd, *of* Weſt-Smithfield.

SUppoſe an inflexible rod, or leaver, of a given length; revolving round (in a vertical poſition) one end as a center, a weight being appended to the other end by a ſtring of a given length; it is required to determine the area of the ſpace, and length of the curve, deſcribed by the weight in one revolution; with the inveſtigation?

Queſt. 16. *By the Rev. Mr.* S——.

LET there be an equilateral triangle given; there is an ellipſis given by poſition, ſo, that if from any point in the ellipſis there be drawn a line parallel to the baſe of the triangle, the ſum of the ſquares of the ſegments intercepted between the point in the ellipſis and the ſides of the triangle, will be equal to the rectangle contained by the line drawn from the point in the ellipſis to the point biſecting the baſe; and a certain given line. 'Tis required to determine the ellipſis?

N. B. An algebraical ſolution is requeſted.

Eclipſe of the moon, March 17, 1764, *obſerved in* Covent-Garden, *with a 3 feet refracting teleſcope of* Dollond's *make.*

	h.	m.	s.	
Apparent time	10	33	0	A duſky penumbra began to be viſible on the north-weſt ſide of the moon's limb.
		38	50	The beginning of the eclipſe.
	13	26	50	The end of the eclipſe.
		33	0	The penumbra quite gone.

Apparent Times of the Eclipſes of the Satellites of Jupiter *which will happen in* April, 1764, *computed, from New Tables, to the Meridian of the* ROYAL OBSERVATORY *at* GREENWICH.

I. Satellite. Emerſions.				II. Satellite. Emerſions.				III. Satellite.				IV. Satellite.			
D	H.	M.	S.	D	H.	M.	S.	D	H.	M.	S.	D	H.	M.	S.
1	16	43	36	17	15	7	20	3	21	43	15	6	10*	4	31
3	11	12	56	19	9*	36	3	7	18*	2	52		12	20	5 E
5	5	41	36	21	4	5	19	11	0	22	20	13	14	6	34 I
7	0	11	40	22	22	34	50	14	13	41	40		16	24	28 E
8	18	40	29	24	17	3	56	18	3	0	52	20	18	8	44 I
10	13	10	17	26	11	33	2	21	16	19	55		20	28	30 E
12	7*	39	36	28	6	2	7	25	5	38	50	28	0	32	4 E
14	2	8	52	30	0	30	17	28	18	57	32				
15	20	38	37												

D	H.	M.	S.
8	17	25	41 I
	18	58	16 E
25	11	33	32 I
	12	27	44 E

Thoſe marked * are viſible at *Greenwich.*

Barometrical

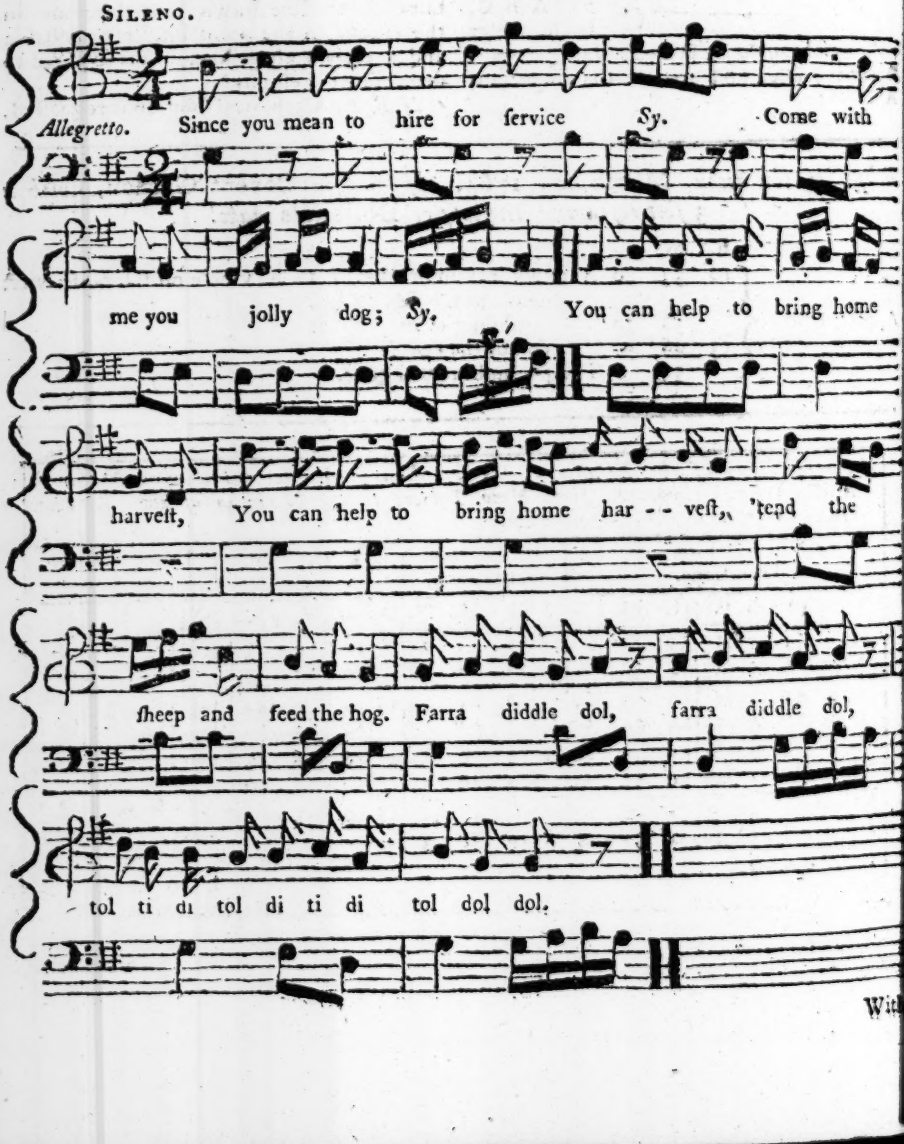
Barometrical Obſervations, *made at* Stanton-Bury, Bucks, *Lat.* 52° 4′ N. *Long.* 47′ W. *from* London, Feb. 1764. *By* T. Walker.

D	Inch.	D	Inch.	D	Inch.	D	Inch.
1	29.00	9	29.96	16	30.50	23	30.40
2	28.34	10	29.75	17	30.20	24	30.30
3	29.14	11	29.35	18	30.10	25	30.10
4	29.79	12	29.95	19	30.10	26	30.10
5	29.50	13	30.00	20	30.45	27	29.90
6	29.75	14	30.00	21	30.50	28	29.85
7	31.25	15	30.10	22	30.50	29	29.82
8	29.90						

POETRY.

Sung by Mr. Beard, *in the character of* Sileno, *and Mr.* Mattocks, *in the character of* Apollo; *in the Comic Opera of* MIDAS.

SILENO.



II.

With three crowns, your ſtanding wages,
You ſhall daintily be fed;
Bacon, beans, ſalt beef, and cabbage,
Butter, milk, and oaten bread.
Farra diddle, &c.

III.

Come, ſtrike hands, you'll live in clover,
When we get you once at home;
And when daily labour's over,
We'll all dance to your ſtrum ſtrum.
Farra diddle, &c.

IV.

APOLLO.

Done, ſtrike hands, I take your offer,
Farther on I may fare worſe;
Zooks, I can no longer ſuffer,
Hungry guts and empty purſe.
Farra diddle, &c.

To BELINDA.

I.

BELINDA liſten to my pray'r,
Accept theſe feeble lays;
My heart-felt cares impreſs'd by love,
Deſire to tune your praiſe.

II.

Extatic joys ſurround my breaſt,
When gazing on your ſight,
Such ſweetneſs flows from ev'ry look,
I'm loſt in wild delight.

III.

No angel form did e'er poſſeſs,
Such ſtriking mein, and air;
Thoſe ſparkling, and engaging eyes,
Can drive me to deſpair.

IV.

Believe me, fair, had I the wealth,
Of *India* to beſtow;
I freely wou'd reſign it all,
To be belov'd of you.

V.

What racking pains, diſturb my peace,
The torture how ſevere!
That I am forc'd to undergo,
When abſent from my dear.

VI.

And will you yet reject my love,
With coldneſs and diſdain?
Be ſtill unkind, and ſuffer me
To die, with grief, and pain?

VII.

Let tender pity move your breaſt,
No longer Strephon ſlight,
His ſoul adores the lovely face,
Where heav'nly charms unite.

VIII.

Was I forbid to ſee you more,
Diſtraction muſt enſue;
I'd ſooner be depriv'd of life,
Than think of loſing you.

Worceſterſhire, March 14. *R. H.*

An ÆNIGMA.

E'RE time began his rolling courſe,
Or heaven's omnipotent voice
T' a thouſand worlds gave birth,
Exiſting I, o'er heaven's ſpace,
Unbounded, had a dwelling place,
But more reſtrain'd on earth.

In palaces, or flatt'ring courts,
Or where deceitful vice reſorts,
I ſeldom do appear:
But in grave philoſophic cells,
Where peace and moral virtue dwells,
I'm conſtant tenant there.

A monſter of infernal race
Too frequently uſurps my place,
And ſteals away my name:
But ſoon I make the fiend reſign
(For victory is ever mine)
Abaſh'd and fill'd with ſhame.

The pious man makes me his choice;
'Tis I, with bold and fearleſs voice,
Proclaim th' oppreſſed's right,
The choiceſt gem on Albion's coaſts,
And happy he that juſtly boaſts
In me he took delight.

Blackman-ſtreet. I. H.

A tranſlation of the French *lines in our magazine for* Jan. *See* p. 36. *Alſo a tranſlation,* p. 89.

TO day is *La Condamine* grac'd with a chair,
And a fam'd academic become;
'Tis a bleſſing to him, that he cannot hear;
T'were a bleſſing to them, were he dumb.

An EPITAPH *in a Country Church-yard in* Kent.
By the celebrated by Mr. G——.

LO! where this ſilent marble weeps,
A friend, a wife, a mother, ſleeps,
A heart, within whoſe ſacred cell
The peaceful virtues lov'd to dwell:
Affection warm, and faith ſincere,
And ſoft humanity were there.
In agony, in death, reſign'd,
She felt the wound ſhe left behind:
Her infant image, here below,
Sits ſmiling on a father's woe:
Whom what await, while thus he ſtrays
Along the lonely vale of days?
A pang, to ſecret ſorrow dear,
A ſigh, an unavailing tear,
'Till time ſhall every grief remove,
With life, with memory, and with love.

Epitaph

Epitaph on Dr. KING, *late principal of St. Mary Hall, Oxford, written by himſelf, and intended to be engraved on his monument in the chapel of the ſaid hall.*

EPITAPHIUM
GUILIELMI KING
A ſeipſo ſcriptum
Pridie nonas Junii
Die natali Georgii III.
MDCCLXII.

Fui
GUILIELMUS KING, L. L. D.
Ab anno MDCCXIX. ad annum MDCC—.
Hujus Aulæ Præfectus.

Literis humanioribus à puero deditus
Eas uſq; ad ſupremum vitæ diem colui.
Neque vitiis carui, neq; virtutibus;
Imprudens et improvidus, comis et benevolus;
Sæpe æquo iracundior,
Haud unquam ut eſſem implacabilis.
A luxuriâ pariter ac avaritiâ
(Quam non tam vitium
Quàm mentis inſanitatem eſſe duxi)
Prorſus abhorrens.
Cives, hoſpites, peregrinos
Omnino liberaliter accepi.
Ipſe et cibi parcus, et vini parciſſimus.
Cum magnis vixi, cum plebeis, cum omnibus,
Ut homines noſcerem, ut me ipſum imprimis:
Neque, heu, novi!
Permultos habui amicos,
At veros, ſtabiles, gratos,
(Quæ fortaſſe eſt gentis culpa)
Perpauciſſimos.
Plures habui inimicos,
Sed invidos, ſed improbos, ſed inhumanos.
Quorum nullis tamen injuriis
Perinde commotus fui
Quàm deliquiis meis.
Summam, quam adeptus ſum, ſenectutem
Neque optavi, neque accuſavi.
Vitæ incommoda neque immoderatè ferens.
Neque commodis nimium contentus.
Mortam neque contempſi
Neque metui.

Deus optime,
Qui hunc orbem et humanos res curas,
Miſerere animæ meæ!

In Engliſh.

EPITAPH
Of WILLIAM KING:
Written by himſelf
June the fourth,
Birth-day of GEORGE III.
MDCCLXII.

I was,
WILLIAM KING, L. L. D.
From the year MDCCXIX to the year MDCC—
Principal of this hall.
Given to polite letters from a boy:
I cultivated them even to the laſt day of my life.
I wonted neither vices, nor virtues;
Imprudent and improvident, gentle and benevolent:
Often too prone to anger,
Never implacable.
To luxury as well as avarice
(Which laſt I conſidered not as a vice
But as madneſs)
Totally averſe.
Citizens, gueſts, and foreigners,
I received with the moſt open hoſpitality:
Myſelf temperate in eating,
In drinking moſt temperate.
I lived with the high, with the low, with all,
That I might know mankind, and chiefly
Myſelf:
Both which, alas, I knew not!
I had very many friends;
But true, firm, grateful,
(Which perhaps is the national failing)
Very, very few.
I had many enemies,
But envious, but wicked, but inhuman:
With whoſe injuries, however,
I was never ſo deeply affected,
As with my own tranſgreſſions.
The extreme old age, to which I attained,
I neither wiſhed for, nor accuſed:
Neither bearing the evils of life too impatiently,
Nor too much delighted with its bleſſings.
Death I neither deſpiſed,
Nor feared.
Moſt Higheſt,
Who takeſt care of this world, and the affairs of men,
Have mercy upon my ſoul!

A CANDID REVIEW *of* New BOOKS.

ART. 1. THE *ſavages of Europe.* 8*vo.* *Davies. Price* 2*s. ſewed.*

In order to give our readers a proper account of this piece, it is proper to apprize them, that it is a ſatire upon the people of England, who are the *ſavages* mentioned in the title. It was written at the deſire of the French monarch, ſoon after the ſhooting

of admiral Byng, and by his order circulated in all the courts in Europe, in order to impreſs a very unfavourable idea of the Engliſh. This is a *fact* which the tranſlator ſhould have told us. As to the book, it is the adventures of a French ſop and his miſtreſs, together with a Chineſe philoſopher in London. The two firſt quitted France, becauſe they were there laughed at; and the latter is come from China in order to civilize the Engliſh, whom he affirms to be as much ſavages as the negroes in Africa. Theſe three are no ſooner landed at Dover, than they behold a number of French priſoners tied neck and heels, hawled out of the hold of a ſhip, and immediately dragged to a priſon. The Frenchman attempted to reſcue his unfortunate countrymen, but in the fray, was terribly wounded; as well as the ſage of China, who was for remonſtrating with the Engliſh Sailors upon their cruelty. They then ſet out for London in a ſhabby carriage conducted by a drunken driver. Soon after they came to town, he happened to enquire of a carman near Charing Croſs, the way into St. James's Park, which the carman inſtead of anſwering only clinched his fiſt at him, and d——— his eyes for a ſoup-meagre monſieur; which the Frenchman reſenting they went to blows, but ſome perſons inſtantly interpoſing put an end to the fight. The crowd which had ſurrounded them inſenbly [and *unaccountably* the tranſlator ſhould have added] hurried the Frenchman, his miſtreſs, and the Chineſe to Tyburn, to ſee an execution there. The malefactors inſtead of being awed by their approaching death are made to commit many ſorts of low buffooneries for the amuſement of the ſpectators, ſome of whom aſſiſt the executioner in diſpatching the unhappy victims. This affords an opportunity for the Chineſe to comment on the brutality and barbarity of the Engliſh. In the mean time the Frenchman's miſtreſs was ſeparated from him by the ſallies of the crowd and almoſt ſqueezed to death. At length he found her almoſt ſpeechleſs, carried out by ſome who were more humane than the reſt. What theſe ſtrangers had hitherto ſeen being only the lower ſort of people, they next reſolved on viewing ſomething that had the appearance of quality: accordingly they viſited Broughton's theatre, but here they were, if poſſible, more ſurpriſed than ever, on viewing two half naked men begin fighting with cutlaſſes, one of whom was killed and afterwards three others wounded. They then went to the playhouſe in hopes of being better entertained; but, alaſs! there was nothing but murders, gliofts, deaths, &c. to be ſeen there. At the end of the farce a company of French dancers happened to be introduced, which occaſioned a great diſturbance and the whole inſide of the houſe was pulled in pieces and deſtroyed. The poor affrighted Frenchman (who received ſome knocks in the ſcuffle) his miſtreſs and the Chineſe made the beſt of their way out. The lady was ſo affected by her diſaſters that ſhe ſhut herſelf up in her chamber, and reſolved to go out no more till ſhe returned to France. But the Frenchman and Chineſe going ſoon after to a coffee-houſe fell in company with a well bred ſenſible Engliſhman, whom they attacked upon the ſavageneſs of his countrymen, and brought the ſcences of Dover, Tyburn, and the playhouſe as a proof of their aſſertions. The Engliſhman vindicated all theſe accidents which but rarely happen. The Chineſe then attempted to reaſon him out of an opinion that the Engliſh had either laws, humanity or religion. The dialogue ended with diſſatisfaction on all ſides. Soon after this, the Frenchman was picked by up a fine girl of the town, who brought him to a dirty clergyman's garret in the Fleet to be married. But no ſooner was the ceremony performed, than a number of conſtables, &c. entered the room and ſiezed the bride. The Frenchman concluding ſomething terrible was like to be the iſſue, luckily eſcaped, and got home to his lodgings, where he found the Chineſe miſerably wounded, and attended by ſurgeons: he had ſeen ſome Engliſh bloods inſult ſome Frenchmen in the ſtreet, and following them into a tavern in order by the force of oratory and philoſophy to ſoften their ferocity, had got thoſe wounds for his officiouſneſs. But the bride finding where the Frenchman lived, went to his lodgings, and greatly abuſed and inſulted his miſtreſs: ſoon after a conſtable came in, and took away the young Frenchman before a trading juſtice, who told him he was lawfully married, ordered him to take his ſpouſe home, who appeared before his worſhip at the ſame time, and threatened him with Tyburn if he contracted any other engagement. In going home they met with her relations who heartily boxed her ears; during the fray the Frenchman ran off, and got to his lodgings; but how great was his ſurprize, when he found neither his miſtreſs nor the Chineſe. Quite mad with diſtraction he ran about the ſtreets looking for them, till night; when returning, he ſtumbled over the Chineſe juſt before his own door; whom he no ſooner got into the houſe, than he enquired about his miſtreſs, but the Chineſe was dead drunk and unable to give him any anſwer, which ſerved only

to diſtract the poor Frenchman ſtill more: at length we are informed of his adventures: he had been in company with a number of Engliſh bucks of quality at a tavern, where he endeavoured to civilize them, but, in reality only made a beaſt of himſelf. As to the Frenchman's miſtreſs, ſhe had been carried away by his ſpouſe's father, immediately after he himſelf had been taken before the juſtice. The father wanted to debauch her, but he could not accompliſh his deſign. The Frenchman was again viſited by his wife, who, finding ſhe could not effect a reconciliation, ſtabbed him with a poignard: he fell, but was not killed. She inſtantly flew to her father and aquainted him that ſhe had killed her huſband: he being in wretched circumſtances reſolved upon deſtroying his whole family, together with the Frenchman's miſtreſs. For this purpoſe he carried them down into a cellar, and firſt ſtabbed her with a poignard; then with a razor he cut the throats of his wife and children; and, laſtly, murdered himſelf. In the mean time the Frenchman languiſhed in his bed: and the good Chineſe, he had the mortification of ſeeing hurried to a priſon. His love of making converts had been taken notice of by ſome informers who found means to convey the habit of a Catholic prieſt into his trunk, and afterwards poſitively ſwore to his being a miſſionary ſent over to make preſelytes: he was condemned to be hanged. While the Frenchman languiſhed in his bed in a moſt diſtreſſed and impoveriſhed condition; his miſtreſs was brought to him. She alone had ſurvived the ſcene in Blickman's vault; her firſt wound had been ſlight, and a long fainting fit had preſerved her from the barbarity of her enemy. They tenderly wept and embraced each other; but, a fever ſeizing them, they were in a few days brought to the point of death. A catholic prieſt aſſiſted them with his purſe: but unhappily when he was performing the laſt offices to them, a number of conſtables ſuddenly entered the room, and inſtantly dragged him to Newgate. They however recovered, and going out one day in queſt of their Chineſe friend, they happened to ſtray towards Tyburn, where they were in an inſtant thunderſtruck at ſeeing the preparations for executing their two beſt friends, viz. the Chineſe philoſopher, and the Roman Catholic prieſt; both charged with being of the Romiſh perſuation. The prieſt was hanged, but the mob taking the philoſopher's part reſcued him. With theſe words the piece then concludes. "Our lovers lamented their dead friend, but made haſte to ſecure the living one. They embraced him with tears in their eyes, hurried him home and ſet off for France with the greateſt expedition,—with firm, but unneceſſary proteſtations of never reviſiting the abominable aſſylum of *The Savages of Europe*."

Such is the ſubſtance of the whole book, which we have been thus particular in relating, only to give our readers a perfect idea of what FALSITIES the French are at all times propagating againſt us; and what mean, wretched, and ſcandalous tricks they make uſe of to hurt us in the opinion of other nations.

ART. 2. *The operations of the allied army in Germany, under the command of his ſerene highneſs Ferdinand duke of Brunſwick and Luxenburgh during the campaigns of* 1758, 59, 60, 61, *and* 62. *Jeffrys.* 4*to.* 19*s. ſewed.*

This work is illuſtrated by a great number of plans of the ſeveral principal battles, finely engraved and coloured; as alſo with ſome large maps, likewiſe finely engraved. But, as to the book, it appears to be little more than tranſcripts from the gazettes, public papers, &c. connected together and arranged in the form of a Journal.

ART. 3. *An Eſſay on painting, written in Italian, by count Algarotti. Davis and Reymers.* 12*mo. Price* 3*s. bound.*

This is a curious and entertaining work, and highly proper to be attentively read by all painters, and ſuch as would become connoiſſeurs in that ſcience, for it inveſtigates the firſt principles of painting, and ſtrongly points out all thoſe ſtudies which the ancient maſters cultivated with ſo much aſſiduity, and are conſequently requiſite to form a compleat painter. The work is divided into chapters, and treats of the education of a painter, of anatomy, perſpective, ſymmetry, colouring, Camera obſcura, drapery, landſcape, and architecture, the coſtume, invention, diſpoſition, expreſſion of the paſſions, proper books, a friend, public judgment, criticiſm, painter's balance, imitation, recreation, and the fortunate condition of a painter. The count has dedicated it to the ſociety for the encouragement of Arts in London, whom he compliments in theſe words: "when Rome had extended her empire into Aſia, Africa, and almoſt over all Europe, ſhe ſaw her citizens arrived at the ſummit of military glory. In their pretentions to ſciences, however, the Romans gave place to the Greeks, whom they revered as their maſters in the ſchool of arts. England hath eſtabliſhed her dominion by ſetting as numerous and more diſtant colonies; while conqueſt hath diſplayed the inſigns of her power, and extended her commerce through

out the whole world. Equally reſpectable in arts and arms the Engliſh nation claims the ſuperiority alſo in the world of ſcience; particularly with regard to the cultivation of thoſe arts, which contribute moſt to the ſtrength and ſplendor of a ſtate. Theſe are agriculture and architecture; one the ſovereign miſtreſs of the polite arts, the other a nurſing mother to all. Painting, indeed, hath but recently engaged the attention of the Engliſh ſo far as to inſpire them with a deſign of contending with the Italians, for thoſe honours of which the latter have long boaſted an excluſive poſſeſſion. The deſign is nevertheleſs become formidable, in being promoted by a ſociety, among whom ſuperiority in place is only the tribute due to ſuperior merit, a ſociety inſtituted by a free people, and compoſed of the choiceſt public ſpirits of their age and country, who, while they generouſly encourage the beſt artiſts, excite emulation in others, by exhibiting the works of all to public view, therein appealing, even from their own judgment, to that of a learned, ſenſible and ingenuous nation. Under ſo diſtinguiſhed a patronage it is hardly poſſible this elegant art ſhould not ſoon flouriſh in London as it hath long done in the milder climates of Parma, Venice, and Rome."

So entertaining and curious a work it is impoſſible we ſhould diſmiſs without laying before our readers an extract: we have therefore ſingled out of the chapter on *perſpective* the following.

"Perſpective, according to that great maſter da Vinci, is to be conſidered as the reins and rudder of painting. It teaches in what proportion the parts fly from, and leſſen upon, the eye; how figures are to be marſhalled upon a plain ſurface, and fore ſhortened. It contains, in ſhort, the whole rationale of deſign."

"Thoſe who would perſuade us that the ancient maſters of Greece knew nothing of perſpective, ſhew that they themſelves know little or nothing of painting. They alledge, as a proof of this, their idle aſſertion, that the rules of perſpective are violated in moſt of the ancient pictures that have reached us; as though the miſtakes and blunders of middling artiſts were a ſufficient ground for calling in queſtion the merits of others, who were allowed to excel in their profeſſion. Now, not to inſiſt on the abſurdity of ſuch a ſuppoſition which we have already expoſed, Pamphilus the maſter of Apelles, and the founder of the nobleſt ſchool in all Greece, has affirmed in the moſt expreſs terms, that without geometry painting muſt fall to the ground. It is well known beſides that the ancients practiced the art of painting in perſpective upon walls in the ſame way that it is now done by the moderns, and that one of the walls of the theatre of Claudius Pulcher repreſenting a roof covered with tiles, was finiſhed in ſo maſterly a manner, that the rooks, a bird of no ſmall ſagacity, taking for a real roof, often attempted to alight upon it. We are likewiſe told, that a dog was deceived to ſuch a degree, by certain ſteps in a perſpective of Dento's, that expecting to find a free paſſage he made up to them in full ſpeed and daſhed out his brains; thus immortalizing, by his death, the pencil of the artiſt which had been the occaſion of it. But what is ſtill more, Vitruvius tells us in expreſs terms, by whom, and at what time this art was invented. It was firſt practiſed by Agatharcus, a contemporary of Æſchylus, in the theatre of Athens; and afterwards reduced to certain principles, and treated as a ſcience by Anaxagoras and Democritus; thus faring like all other arts which exiſted in practice before they appeared in theory. The thing I think may be thus accounted for. Some painter, who happened to be a very accurate obſerver of nature, firſt exactly repreſented thoſe effects which he ſaw conſtantly attend the images offered to our eyes by exterior objects, and theſe effects came afterwards to be demonſtrated by geometricians as ſo many neceſſary conſequences, and reduced to certain theorems: juſt as from thoſe chief d'œuvres of the human mind, the Iliad of Homer and the Œdipus of Sophocles, both built on the moſt accurate obſervations of nature, Ariſtotle found means to extract the rules and precepts contained in the art of poetry. It is therefore clear, that, ſo early as the age of Pericles, perſpective was reduced into a compleat ſcience; which no longer continued confined to the threatre but made its way into the ſchools of painting, as an art not leſs neceſſary to painters in general, than it had been found to ſcene-painters in particular. Pamphilus, who founded Sicion the moſt flouriſhing ſchool of deſign, taught it publickly: and from the time of Apelles, Protogenes and the other bright luminaries of painting amonſt the ancients, it was practiced by the Greek painters, in the ſame manner as it was ſo many ages after, by Bellini, Pietro Perugino, and others down to the days of Titian, Raphael, and Corregio, who put the laſt hand to painting, and gave it all perfection it was capable of receiving. Now a painter having formed a ſcene in his mind, and ſuppoſed, as is cuſtommary, that the capital figures of this ſcene in his mind lie cloſe, or almoſt cloſe to the back of his canvaſs, he is, in the next

place, to fix upon ſome point on this of the canvaſs, from which he would chuſe his piece ſhould be ſeen. But in chuſing this point, which is called the point of ſight, regard ſhould be had to its ſituation, on the right or left of the middle of the canvas; but above all things, to its diſtance and its height with reſpect to the lower edge of the canvas, which edge is called the baſe line, and is parallel with the horizontal line that paſſes through the eye. For by aſſuming the point of ſight, and conſequently the horizontal line, too low, the planes upon which the figures ſtand, will appear a great deal too ſhallow, as by aſſuming it too high they will appear too ſteep, ſo as to render the piece far leſs light and airy than it ought to be. In like manner, if the point of ſight is taken at too great a diſtance from the canvas, the figures will not admit of degradation enough to be ſeen with ſufficient diſtinctneſs; and if taken too near it the degradation will be too quick and precipitate to have an agreeable effect. Thus, then it appears that no ſmall attention is requiſite in the choice of this point. When a picture is to be placed on high, the point of ſight ſhould be aſſumed low, and *vice verſa*; in order that the horizontal line of the picture may be, as near as poſſible, in the ſame horizontal plane with that of the ſpectator; for this diſpoſition has an amazing effect. When a picture is to be placed very high, as amongſt many others that of the purification by Paiola Veroneſe, engraved by le Feore, it will be proper to aſſume the point of ſight ſo low, that it may lie quite under the picture, no part of whoſe ground is in that caſe to be viſible; for were the point of ſight to be taken above the picture the horizontal ground of it would appear ſloping to the eye, and both figures and buildings as ready to tumble head foremoſt. It is true indeed there is ſeldom any neceſſity for ſuch extraordinary exactneſs, and that unleſs in ſome particular caſes, the point of ſight had better be high than low, the reaſon of which is, that as we are more accuſtomed to behold people on the ſame plane with ourſelves, than either higher or lower, the figures of a piece muſt ſtrike us moſt, when ſtanding on a plane nearly level with that upon which we ourſelves ſtand. To this it may be added, that by placing the eye low and greatly ſhortening the plane, the heels of the back figure will ſeem to bear againſt the heads of the foremoſt ſo as to render the diſtance between them far leſs perceptible than it otherwiſe would be. The point of ſight being fixed upon, according to the ſituation in which the picture is to be placed, the point of diſtance is next to be determined; in doing this a painter ſhould carefully attend to three things: firſt, that the ſpectator may be able to take in, at one glance, the whole, and every part of the compoſition; ſecondly, that he may ſee it diſtinctly; and thirdly, that the degradation of the figures, and other objects of the picture be ſufficiently ſenſible."

ART. 4. *The adminiſtration of the colonies.* Wilkie. 8vo. Price 2s 6d.

This is only the *firſt part* of a very ſenſible but laborious diſſertation on the neceſſity of eſtabliſhing a proper and ſeperate adminiſtration for the colonies. The ſagacious, but languid author, firſt lays down the univerſal apprehenſion there is of ſome new criſis forming; ſome revolution of events beyond the ordinary courſe of things. The great European ſtates *now* knows the importance of *commerce*, and each is *now* aiming at a grand commercial intereſt in order to eſtabliſh the baſis of a great commercial dominion. The forming of this commercial dominion is what conſtitutes the *preſent* criſis. As the forming of this criſis fixes the *object* on which our government ſhould be employed, "ſo the taking leading meaſures in forming our American poſſeſſions into one dominion, of which Great-britain ſhould be the commercial center, is the *preciſe duty* of government at this criſis." The author then ſhews, in a manner which proves him to be perfectly maſter of what he has undertaken, than nothing but a ſeperate and independent department of adminiſtration, or office, under the direction of an *able* miniſter, can conduct, in a proper and neceſſary manner, this great and important part of national buſineſs: and of the thing itſelf he ſpeaks thus, "the firſt ſpring of this direction, the baſis of this government, is the adminiſtration at home. If that department of adminiſtration, which ſhould have the direction of theſe matters, be not wiſely and firmly bottomed, be not ſo built, as to be a *practical*—be not ſo really ſupported by the powers of government, as to be an *efficient adminiſtration*, all meaſures for the adminiſtration of theſe intereſts, all plans for the government of theſe powers are vain and ſelf-deluſive.—That part of government which ſhould adminiſter this great and important branch of buſineſs, ought, in the firſt place, to be the center of all information, and application from all the intereſts and powers which form it; and ought, from this center, to be able fully, uniformly, and efficiently to diſtribute its directions and orders. Wherever the wiſdom of ſtate ſhall determine that

that this center of information ſhall be fixed; from whatever department all appointments, orders, and executive adminiſtration ſhall iſſue, it ought ſomewhere to be fixed, known, of record, and undivided; that it may not be partial, it ought to extend to all times, and all caſes. All application, all communication, all information, ſhould center immediately and ſolely in this department: this ſhould be the ſpring of all nominations, inſtructions, and orders. —— Whenever it is thought proper (as moſt certainly it will, ſome time or other, tho' perhaps too late) to form ſuch department, it muſt (if I may ſo expreſs myſelf) be ſovereign and ſupreme, as to every thing relating to it; or to ſpeak plainly out, muſt be a ſecretary of ſtate's office in itſelf." To this are added many other neceſſary conſiderations of equally great importance, but which are too numerous for us to lay down and explain, or properly extract from the book; we muſt therefore refer all thoſe who call themſelves patriots, or friends to their country, to the book itſelf, in which they will find many arguments well worth their moſt ſerious attention.

ART. 5. *A trip to the moon. Containing an account of the iſland of Noibla, its inhabitants, religious and political cuſtoms, &c. By Sir* Humphrey Lunatic, *Bart. Printed at York by* A. Ward, *for* Crowder, *&c. in London.* 8vo. Price 2s. 6d.

The author ſeems to have adopted a name not much unſuited to himſelf, if his ability may be judged of by the merit of this book, which is nothing more than the writer fell aſleep upon a green hill, and was inſenſibly, and moſt unaccountably carried up into the moon, where he ſaw every body that had flouriſhed below for theſe two or three centuries paſt, variouſly employed according to either their merits or their folly; among whom queen Elizabeth makes a great figure; nor is Bath leſs diſtinguiſhed for its cuſtoms. But whether any inference or moral is intended to be drawn from this (at preſent) unmeaning narration we cannot tell, for when we come to the end we find this is only the *firſt* volume. No mention is made of what more is intended.

ART. 6. *The life and adventures of* Francis Clive. 8vo. 2 vols. Lownds. pr. 6s.

A modern romance.

ART. 7. *Some political and literary obſervations, on reading ſome of the works of the Rev. Mr.* Churchill; *and particularly the Conference. In a letter to that gentleman.* Hinxman. 4to. Price 2s.

A dry, dull diſquiſition of politics, from which it is no ſmall difficulty to judge what the tedious author chiefly aims at. He expoſtulates with Mr. Churchill as a politician, vindicates the peace, lord *B*—, and diſhes up all the ſtale arguments hackneyed thro' all the news papers for theſe fifteen months paſt. After near forty-ſix large and cloſe quarto pages ſpent upon this, we come to a ſhort criticiſm on the Conference, of which we ſhall give our readers the following as a ſpecimen.

P. 1. l. 1. " Grace ſaid in form, which
ſceptics muſt agree
When they are told that grace was ſaid by
me."

" This ſhould have been, you ſee, " agree *to*", or rather, " to which ſceptics agree."

l. 6. " My lord, *in uſual taſte*, began to
yawn."

" Do you quite like that expreſſion upon recollection, Sir? To me it is deficient, and unſatisfactory: nor I confeſs is the reſt of the page, to my ear and taſte, current, natural and free. I allow for its being the beginning, and, as it were, opening of your poem."

p. 2. l. 5. " Her ſpirit ſeems her intereſt
to oppoſe."

" How is the *intereſt* of *the muſe* oppoſed? That *your* intereſt may I readily admit; but the muſe's poſſibly may be increaſed. —— To this follows a great deal of the inconvenience of virtue, to which you are ſo ſtrongly attached; I hope you are ſo, as much as you tell us, but ſurely it is rather common place. You then go on to ſay,

" True virtue means let reaſon open her
eyes,
Nothing with fools, and int'reſt with the
wiſe."

" How this is I own I do not ſee; nothing with fools? What fools? For, to ſome fools, I thought his lordſhip might have ſaid it meant a great deal? But *fools* is a very vague expreſſion, eſpecially with poets, and moſt eſpecially with ſatirical poets."

ART. 8. *A Letter to the common council of the city of London, with remarks on lord chief juſtice Pratt's letter to the city of Exeter. Nicoll.* 8vo. *Price* 1s.

This is a pamphlet from the miniſterial ſide, upon the ſubject of the common council lately thanking and inſtructing their repreſentatives, and preſenting the freedom of the city to lord chief juſtice Pratt, and his lordſhip's letter to the city of Exeter. The writer poſitively affirms, the common council have *no* right to inſtruct the repreſentatives. With regard to the freedom preſented to his lordſhip for his univerſally admired deciſions, the writer thus ſays, " the deciſion may have been, as I truſt it

was,

was, honeſt and deliberate, and yet, by ſuch deciſion, his lordſhip may not have eminently diſtinguiſhed his knowledge of the law. Who does not ſee that on the contrary, it may have been honeſt and deliberate, and yet at the ſame time be unprecedented, injudicious, inconſiſtent, and erroneous?——But your preſumptions, gentlemen, is not confined to your unwarrantable intermedling with the deciſion of the common pleas; you venture further to affirm, that the object of that deciſion has been frequently produced to, but ſo far as appears to your court, never debated in the court of King's Bench. The meaning of this inſinuation is too obvious to need a comment." A moſt malignant character is then drawn of one of the city repreſentatives. The writer next tranſcribes lord chief juſtice Pratt's letter to the city of Exeter; and, among his many *very free* remarks upon it, are the following. "In the laſt paragraph, where his lordſhip promiſes to perſevere in the upright execution of his office, who would not imagine that ſome petty miniſterial officer was here proclaiming his attachment to his patron and doing fealty for his office?——But the ſentence, alas! goes on *pari paſſu*, till at length it crawls to a concluſion, and ends with four flat monoſyllables. You ſee gentlemen, the fatal effects of your intoxicating applauſe. The grave, the reverend, the learned judge is no longer himſelf. Stunned with the eccho of your plaudits, he is deaf to the remonſtances of his own better judgment." There are many other paſſages in this pamphlet, but they are *too free* for us to meddle with.

ART. 9. *Ingratitude. A poem. Inſcribed to the moſt grateful of mankind.* 4to. *Williams. Price* 1s.

This is a ſevere ſatire upon a gentleman who has been perhaps, at no time very popular among the *military*. He is traced from his originality, to his preſent height of proſperity: at which time the poet moſt horridly characterizes him, and taxes with *Ingratitude*. As to the poetry we ſhall give our readers the following lines as a ſpecimen.

"Away, thou miſer, count thy millions o'er,
And comfort ſeek in thy ill gotten ſtore;
Away, proud wretch; and with ſome ſtrumpet's charms
Feed thy ſoul luſt, and wallow in her arms:
Shun'd like the plague, go ſaunter at thy eaſe,
And loath'd by others, ſtrive thyſelf to pleaſe,
Go, loll in yonder ſolitary bow'r,
There think one ſullen, ſilent, ſolemn hour;
Think of the *Grantham* deſk, th' attorney's trade,
Think o'er the figure you, *ſince then*, have made."

ART. 10. *Gotham. Book* II. *Kearſly, &c.* 4to. *Price* 2s. 6d.

Account of Mr. Churchill's ſecond book of Gotham: the chief ſcope of this book which is in all reſpects better than the firſt, is a delineation of the *Stuart* kings of England, and as a ſpecimen of it we ſhall preſent our readers with his introduction to the characters of James I. and Charles I. which are contained in this book. As king of Gotham he thus harangues his ſubjects.

O my poor people, O thou wretched earth,
To whoſe dear love, tho' not engag'd by birth,
My heart is fix'd, my ſervice deeply ſworn,
How (by thy father can that thought be borne,
For monarchs, would they all but think like me,
Are only fathers in the beſt degree)
How muſt thy glories fade, in ev'ry land
Thy name be laugh'd to ſcorn, thy mighty hand
Be ſhortened, and thy zeal, by foes confeſs'd,
Bleſs'd in thy ſelf, to make thy neighbours bleſs'd,
Be robb'd of vigour, how muſt freedom's pile,
The boaſt of ages, which adorns the iſle,
And makes it great and glorious, fear'd abroad,
Happy at home, ſecure from force and fraud,
How muſt that pile, by ancient wiſdom rais'd
On a firm rock, by friends admir'd and prais'd,
Envy'd by foes, and wonder'd at by all,
In one ſhort moment into ruins fall,
Should any ſlip of STUART's tyrant race
Or baſtard, or legitimate, diſgrace
Thy royal ſeat of empire! but what care
What ſorrow muſt be mine, what deep deſpair
And ſelf-reproaches, ſhould that hated line
Admittance gain thro' any fault of mine!
Curs'd be the cauſe whence GOTHAM's evils ſpring,
Tho' that curs'd cauſe be found in GOTHAM's king.
Let war, with all his needy, ruffian band,
In pomp of horrour, ſtalk thro' GOTHAM's land
Knee-deep in blood; let all her ſtately tow'rs
Sink in the duſt; that court, which now is our's,
Become a den, where beaſts may, if they can,
A lodging find, nor fear rebuke from man;
Where yellow harveſts riſe, be brambles found;
Where vines now creep, let thiſtles curſe the ground;
Dry, in her thouſand vallies, be the rills;
Barren the cattle, on her thouſand hills;
Where

Where pow'r is plac'd, let tygers prowl for prey;
Where juſtice lodges, let wild aſſes bray;
Let cormorants in churches make their neſt,
And, on the ſails of commerce, bitterns reſt;
Be all, tho' princes in the earth before,
Her merchants bankrupts, and her marts no more;
Much rather would I, might the will of fate
Give me to chuſe, ſee GOTHAM's ruin'd ſtate
By ills on ills, thus to the earth weigh'd down,
Than live to ſee a STUART wear her crown.
Let Heav'n in vengeance arm all nature's hoſt,
Thoſe ſervants, who their maker know, who boaſt
Obedience as their glory, and fulfill,
Unqueſtioned, their great maſter's ſacred will.
Let raging winds root up the boiling deep,
And, with deſtruction big, o'er GOTHAM ſweep;
Let rains ruſh down, till FAITH with doubtful eye
Looks for the ſign of mercy in the ſky;
Let peſtilence in all her horrors riſe;
Where'er I turn, let famine blaſt my eyes;
Let the earth yawn, and, e're they've time to think,
In the deep gulph let all my ſubjects ſink
Before my eyes, whilſt on the verge I reel;
Feeling, but as a monarch ought to feel,
Not for myſelf, but them, I'll kiſs the rod,
And, having own'd the juſtice of my God,
Myſelf with firmneſs to the ruin give,
And die with thoſe for whom I wiſh'd to live.
This (but may heav'n's more merciful decrees
Ne'er tempt his ſervant with ſuch ills as theſe)
This, or my ſoul deceives me, I could bear;
But that the STUART race my crown ſhould wear,
That crown, where, highly cheriſhed, FREEDOM ſhone
Bright as the glories of the mid-day ſun,
Born and bred ſlaves, that they, with proud miſrule,
Should make brave, free-born men, like boys at ſchool,
To the whip crouch and tremble——O, that thought!
The labouring brain is ev'n to madneſs brought
By the dread viſion, at the mere ſurmiſe
The thronging ſpirits, as in tumult, riſe,
My heart, as for a paſſage, loudly beats,
And turn me where I will, diſtraction meets,
O my brave fellows, great in arts and arms,
The wonder of the earth, whom glory warms
To high atchievements, can your ſpirits bend
Thro' baſe controul (ye never can deſcend
So low by choice) to wear a tyrant's chain,
Or let, in FREEDOM's ſeat, a STUART reign.
If fame, who hath for ages far and wide
Spread in all realms, the cowardice, the pride,
The tyranny, and falſehood of thoſe lords,
Content you not, ſearch ENGLAND's fair records,
ENGLAND, where firſt the breath of life I drew,
Where, next to GOTHAM, my beſt love is due.
There once they ruſ'd tho' cruſh'd by WILLIAM's hand,
They rule no more to curſe that happy land.

ART. 11. *Reflections on the preſent commotions in Bengal. Kearſly.* 4to. *Price* 1s.

ART. 12. *An addreſs to the proprietors of the Eaſt India Stock. Henderſon.* 6d.

ART. 13. *Facts relating to the treaty of commerce, lately concluded by governor Vanſittart, without the conſent of his council, with the nabob of Bengal. Becket.* 4to. 1s. 6d.

ART. 14. *An addreſs to the proprietors of Eaſt India ſtock, ſetting forth the unavoidable neceſſity and real motives for the revolution in Bengal, in* 1760. *By John Zephaniah Holwell. Becket.* 4to. *Price* 2s.

ART. 15. *Holwell's refutation of a letter from certain gentlemen (ſee page* 98*) of the council of Bengal, to the honourable the ſecret committee, ſerving as a ſupplement to his addreſs to the proprietors. Becket.* 4to. *Price* 1s.

ART. 16. *An addreſs to the proprietors of Eaſt India Stock. Kearſly.* 4to. 6d.

ART. 17. *A narrative of what happened in Bengal in* 1760. *Bathurſt.* 8vo. 1s.

ART. 18. *A ſupplement to the ſame. Bathurſt.* 6d.

ART. 19. *Another letter from a proprietor of India Stock, to his friend a proprietor. Bathurſt.* 8vo. *Price* 6d.

ART. 20. *Reflections on the preſent ſtate of our Eaſt India affairs. Lowndes.* 8vo. *Price* 1s. 6d.

ART. 21. *A letter to the proprietors of Eaſt India ſtock, from lord Clive. Nourſe.* 8vo. *Price* 1s. 6d.

His lordſhip has here ſtated his own caſe chiefly with reſpect to his rents being ſtopped, and a reply to ſome aſperſions upon his character in the public papers. It is a well written ſenſible performance, and highly uſeful for all thoſe who would enter with the moſt ſcrupulous exactneſs into the clear ſtate of India affairs.

ART. 22. *An intereſting and important letter from* John Wilkes, *Eſq; in Paris, to a noble*

noble lord in London. Publiſhed by his lordſhip's permiſſion. Sumpter. Fol. Pr. 1s.

A vile catch-penny.

ART. 23. *Liberty in the ſuds.* Nicolls. 4to. Price 1s. 6d.

A poetical abuſe on meſſrs. Wilkes and Churchill.

ART. 24. *Epiſtle from lord* Scudamore *in the Elyſian fields, to* Velters Cornwall, *Eſq; repreſentative for the county of Hereford. Occaſioned by the late duty on cyder.* Pridden. 4to. Price 6d.

ART. 25. *Nature. An ethic epiſtle. Inſcribed to the honourable Mrs.* D—y. Flexney. 4to. Price 1s.

ART. 26. *A general and particular account of the annular eclipſe of the ſun, which will happen on the firſt of April,* 1764. *With a general and particular map* (22 *by* 14 *Inches*) *of the paſſage of the moon's ſhade over the earth. By the author of the Royal Aſtronomer.* Whiſton, *&c.* 4to. Price 2s. 6d.

ART. 27. *A natural repreſentation of the annular eclipſe of the ſun, which will happen on the firſt of April,* 1764; *conſtructed for the city of London. By* Danmonium. Law. 6d.

ART. 28. *The nature and conſtruction of a ſolar eclipſe, explained and exemplified in that which will happen on the firſt of April,* 1764. *By* Benjamin Martin. *Sold by the author.* 4to. 1s. 6d.

His method of exhibiting the phaſes of a ſolar eclipſe.

AS many people are extremely deſirous of viewing a ſolar eclipſe to the greateſt advantage, ſo there are three or four methods of doing this, which I ſhall juſt mention on this occaſion.

The *firſt* is with a ſmall teleſcope, or *Opera Glaſs*, furniſhed with a piece of dark glaſs at the end, and magnifying about 8 or 10 times.

The *ſecond method* is by means of a ſingle lens or glaſs, of a very large focal diſtance, placed in a ball and ſocket fixed in the hole of a window-ſhutter. If the focal diſtance be 10 feet, the image of the ſun will be *one inch* in diameter; if 20 feet, *two inches*; 30 feet, *three inches*; and ſo on. But in ſuch caſes, the room muſt be very large, and the glaſs placed as high in it as poſſible.

A *third method* is, by ſcrewing a ſmall ſolar teleſcope to a ſcioptric ball, and its ſocket may be fixed in the hole of a window-ſhutter, as before, or to a board moveable in a frame, like a looking glaſs, and placed on a table in a light room, and then by inclining the tube to receive the ſun-beams, and proper moving and adjuſting the eye-piece, you will get an image of the ſun and moon on a ſkreen, placed at a convenient diſtance, much larger than can be had by a ſingle glaſs, viz. 6 or 7 inches diameter, more or leſs, according to the teleſcope you uſe, and the diſtance you can go from the glaſs.

But the *fourth* and *beſt method* of all by much, both in regard to eaſe and magnifying power, is, by uſing a reflector as a ſolar teleſcope; for here you have a *threefold power* of magnifying the ſun's image; and therefore at two feet only from the eye-piece, you may have an image of the ſun twelve inches in diameter on a ſkreen placed at that diſtance: and for this purpoſe, the room needs not to be darkened; it will be ſufficient to take a ſheet of large paſte-board, with a hole in the middle, ſuch as will cauſe it to go tight upon the open end of the braſs tube; for this ſhades the paper on the ſkreen, and allows the eclipſe to be ſeen to the greateſt advantage deſireable. The reflector, whoſe large metal is of 9 inches focal diſtance, will do this; a larger will give ſtill a larger view of the eclipſe, and its phaſes.

ART. 29. *The method of calculating an eclipſe geometrically; with an example of the great eclipſe of the ſun, which will happen April* 1, *between* 9 *and* 10 *in the morning. By* D. Denning, *and* John Probert. Crowder. 8vo. Price 6d.

30. *The young wife's guide in the management of her children.* Griffin. 8vo. Pr. 1s. 6d.

31. *Of moderation. A ſermon preached before the lords ſpiritual and temporal, in the abbey church of Weſtminſter, Jan.* 30, 1764, *By* Thomas, *lord biſhop of Briſtol.* Tonſon. 4to. Price 6d.

32. *The merry ſtory teller.* Knowles. 8vo. Price 1s.

A collection, or rather an abridgment of all the ſtories, publiſhed ſome years ago, in a work entitled The modern ſtory teller.

ART. 33. *An eſſay in vindication of the continental colonies of America, from a cenſure of Mr.* Adam Smith, *in his theory of moral ſentiments. By an American.* Becket. 8vo. Price 1s.

The cenſure which Mr. Smith had paſſed upon the North Americans was, that they were the refuge of the jails of Europe, without inheriting the virtues of any of the countries from whence they come: and that the African negroes (whom he called a nation of heroes) look upon their maſters as ſuch. This writer affirms the contrary: he paints the negroes as the moſt vile, deteſtable people upon the face of the earth, and ſhews that the inhabitants of our colonies are moſt of them deſcended from worthy anceſtors.

A

A CHRONOLOGICAL MEMOIR of OCCURRENCES.

Mar. 2. MR. Henry Schultz, a celebrated mechanic at Copenhagen, has contrived a clock, by which the longitude may be diſcovered at ſea. This clock ſhews at all times, either in the day or night, what the hour is at London, Paris, Copenhagen, and Peterſbourg, together with the increaſe and decreaſe of the moon, to the ſeconds of a minute.

7. The ſociety for the encouragement of arts have ordered their exhibition of painting to be opened at their great room in the Strand, on the 14th of May next.

Exeter, March 5. At a chamber held the 27th of February laſt, the mayor, aldermen, and common council of this city, came to the following reſolutions.

Reſolved unanimouſly,

That the right honourable ſir Charles Pratt, lord chief juſtice of his majeſty's court of common pleas, be preſented with the freedom of this city; and that he be moſt reſpectfully requeſted to accept thereof as an expreſſion of our profound veneration for his conſummate abilities, and as a teſtimony of that gratitude which he hath merited at the hands of every Engliſhman, by the unſhaken courage, and inflexible integrity, which he hath ſo ſignally diſplayed in the public adminiſtration of juſtice, and in maintaining and vindicating the private liberty and propriety of the ſubject, which make ſo eſſential a part of the legal and conſtitutional rights of this free people.

Ordered, That the admiſſion to the ſaid freedom be preſented to his lordſhip in a gold box.

Ordered, That the town clerk do tranſmit to his lordſhip a fair copy of the above reſolutions with the reſpectful compliments of this body.

And a copy of the ſaid reſolutions having been according tranſmitted to the lord chief juſtice by the town clerk, the following letter from his lordſhip was yeſterday received by him.

SIR,

I received the favour of your's this poſt, importing the unanimous reſolution of the chamber of Exeter, to preſent me with the freedom of that ancient and reſpectable city; for which I beg you will be pleaſed to return my moſt reſpectful thanks, and to inform the chamber, that I feel an uncommon pleaſure in this teſtimony of good will from the city of Exeter, as it is the capital of that county where my father, and all his anceſtors took their birth, and where I myſelf heretofore received an encouragement in my practice far beyond my merits.

If I have deſerved in any part of my conduct, the approbation of my countrymen as an honeſt and impartial judge, I ſhall not be aſhamed to confeſs, that I take a pride in that applauſe that flows from an opinion of my integrity, leaving the praiſe of capacity to others whom God has endued with more ſhining parts and ſuperiour abilities.

I can make no other return, (and I know the chamber of Exeter expect no other) for this valuable compliment, than a promiſe to perſevere in an upright and impartial execution of my office, and I hope this promiſe will obtain ſome degree of credit, when it is conſidered, that by deviating from this path, I ſhall not only forfeit the eſteem of your city, which I am now ſo honourably poſſeſſed of; but ſhall likewiſe diſgrace my royal maſter's nomination and break my oath.

I am, SIR,
With all due reſpect to yourſelf,
As well as the chamber,
Your moſt obedient faithful ſervant,
Lincoln's-Inn Fields,
March 1, 1764. C. PRATT.

9. Wedneſday ſir Tho. Harriſon, chamberlain of London, waited on the right hon. lord chief juſtice Pratt, and preſented to his lordſhip the freedom of this city in a gold box; and his lordſhip having condeſcended to ſit for his picture, the committee gave orders yeſterday to mr. Reynolds to paint the ſame, which when finiſhed, will be hung up near the Huſtings in Guildhall.

An impartial review of the nature of our Eaſt India diſpute.

In order to fully inform the unintelligent reader (whoſe curioſity muſt doubtleſs have been awakened by the numerous publications in the news papers, &c.) of the nature of this diſpute; it is neceſſary to previouſly inform him, that Nabobs of India, are, in effect, no more than a kind of viceroys to the great Mogul; who is great lord or ſovereign of all India. But when Nadir Shah invaded his dominions and plundered his capital, the nabobs of India, taking advantage of his weakneſs, almoſt threw off their dependence, and have ſince levied troops, and formed connections with the Europeans to ſupport their own perſonal power: and lately have been occaſionally made and depoſed without any regard to the court of the great Mogul, who is the ſupreme. With reſpect to Bengal, it is proper to obſerve, that, previous to the breaking out of the late war, the nabob of that country (Sourajah Dowla) had determined to fleece and plunder all the Europeans in his dominions that he might reign entirely

arbitrary and independent. He was a young man, extremely tyrannical, ignorant, and obſtinate. He ſhewed his hatred firſt againſt the Engliſh, becauſe he apprehended they were the richeſt. Accordingly the company's ſervants and people at Calcutta felt the firſt effects of cruelty and avarice. Being generally abhored by his own ſubjects, a conſpiracy was formed againſt him, and when Colonel Clive took the field againſt him, the effects of this conſpiracy appeared at the deciſive action of Plaſſey, by which he was depoſed (and afterwards put to death), and, one of his own generals Meer Jaffier Alley Cawn (the chief of the conſpirators) made nabod in his ſtead, who, in gratitude to the Engliſh for elevating him to that dignity, laviſhed upon them immenſe ſums and riches; perhaps more than in prudence he ought. However while Colonel Clive remained in India he ſupported his dignity with becoming magnificence and ſpirit. But ſtill there was a party forming againſt him; the numerous relations and friends of the late nabob beheld him with diſguſt, and they did not fail to irritate many others againſt him. His actions were not of the beſt colour: for he was wicked, cruel, tyrannical and deceitful: and he, at leaſt once, if not more than once, entered into a deſign for diſtreſſing the Engliſh, and throwing entirely off his hitherto dependence on them. Soon after Colonel Clive left India he was depoſed by the Engliſh council at Bengal, upon an opinion that it was for the intereſt of the company ſo to do; and another nabob (Coſſim Ally Cawn) made in his room. The new nabob not believing the faith of the Engliſh was to be abſolutely relied on, and perhaps aſpiring at independency has commenced hoſtilities againſt us, by ſeizing our factories, and murdering the ambaſſadors who were ſent to treat with him. Upon this, thoſe who diſapproved of the laſt revolution (for there were ſeveral) have put up Jaffier Ally Cawn again as nabob: and thoſe who were chiefly inſtrumental in depoſing him, have acceded to this meaſure. But as it is agitated in England whether thoſe perſons who ſeem to have thus changed their ſentiments are proper to remain in the council at Bengal, the diſputed point is whether they ſhall or not; and if not, who ſhall be appointed in their ſtead. There are at preſent TWO nabobs of Bengal and probably both in the field: ſo that the firſt news will in all likelihood, be of the moſt intereſting nature. One other thing is likewiſe worthy the moſt ſerious attention: if the Mogul court regains (as it certainly will in time) its former ſtrength and power, and ſhould make the nabobs accountable for the revenues of the provinces, as they formerly were, what will then become of our Eaſt India company? they muſt either refund or be driven from the Mogul's dominions.

14. The meeting of the proprietors of India ſtock on monday was opened with a ſpeech from ſir Francis Goſling, ſetting forth the critical ſituation of the company's affairs at Bengal, and concluding with a motion, 'That the court do reſolve, that it is the 'opinion of this court, that conſidering the 'great alteration of our affairs in Bengal, 'by the late commotion in that ſettlement, 'and the reſtoration of Meir Jaffier Alli 'Kawn to the ſubahſhip, the preſent appointment of ſucceſſor to the preſidency 'and the military appointment of the commander of our forces, are therefore improper.'

This occaſioned much debate, till a motion was made by another gentleman, 'that 'lord clive be requeſted by this court to 'take upon him the preſidency at Bengal, 'and the command of the military forces 'there, upon his arrival in that province.' This ſeeming to be the ſenſe of a great majority, lord Clive ſtood up, and in a very handſome ſpeech ſignified, that though happily his preſent fortune rendered ſuch an offer a matter of indifference to him in a lucrative view, and though his future ſchemes of life were totally different, yet if he ſhould be called upon by the general voice of the proprietors, and 'matters could be ſettled, 'ſo that he could proceed with any degree 'of prudence, ſupported by a friendly and 'united direction, he would once more ſtand 'forth in their ſervice.

After a ſhort debate the queſtion was put, and carried without a diviſion.

20. The portreve, bailiff, and other, the principal inhabitants of the borough of Honiton in Devonſhire, have ſent their thanks to ſir George Yonge, bart. their repreſentative in parliament, for his ſteady zeal and endeavours to protect and ſecure the perſons, houſes, and papers of their countrymen, from arbitrary viſits and ſeizures.—To which ſir George has ſent them a very polite anſwer, aſſuring them of his continuing in the ſame principles and conduct from the hopes of their future confidence, and from a ſenſe of the honour conferred upon him.

The high ſheriff and grand Jury of the county of York have thanked their members, ſir George Savile, bart. and Edwin Laſcelles, eſq; for their ſpirited conduct in parliament on that intereſting queſtion, 'whether a general warrant for apprehend-'ing and ſeizing the authors, printers, and 'publiſhers of a ſeditious libel, together 'with their papers, is warrantable by law, 'or not; and to recommend their ſteady perſeverence

perſeverence in bringing to a ſpeedy determination ſo great and intereſting a point, in which the liberty of the ſubject is ſo deeply concerned.

The city of Hereford have likewiſe returned thanks to their members for the ſame.

28. Yeſterday the freedom of the city of Exeter was preſented to Lord Chief Juſtice Pratt in a gold box, made by Mr. John Bayley, an aminent gold-ſmith in Wood-ſtreet, of which the following is a deſcription. The box is circular: on the top are engraved the arms of the city of Exeter, viz. party per-pale, gules and ſable; a caſtle triple towered; port open, with a half portcullis, Or; creſt, on a wreath, Or and ſable, mantled gules; a demi-lion, gules; crowned, Or; holding a mound, Or; on it a croſs flory, Or. Supporters, two Pegaſi argent, maned and unguled, Or: the wings barry wavy, azure. On the bottom of the box is the following inſcription.

The gratitude of
the CITY of EXETER
to the Right Honourable
SIR CHARLES PRATT,
Lord Chief Juſtice
of HIS MAJESTY'S COURT *of*
Common Pleas.
——— quo vindice tandem
Jure ſuo populis uti
Legumque licebit.

In the London Gazette, of Mar. 28, is the king's proclamation, dated March 26, 1764, for the ſale by auction of all his majeſty's lands in the iſlands of Grenada, the Grenadines, Dominica, St. Vincent and Tobago, excepting ſuch lands as ſhall be neceſſary for fortifications and other military works, glebes for miniſters, allotments for ſchool-maſters, high roads, wood-lands, and other public purpoſes; under the following conditions. That the purchaſers pay 20 per cent. of the whole purchaſe money down, 10 per cent. in one year, 10 per cent. in the ſecond year, and 20 per cent. every year after, till all is paid. That every purchaſer ſhall keep one white man, or two white women, for every 100 acres cleared, or pay 20l. for every white woman, and 40l. for every white man wanting. That one acre in 20 ſhall be cleared every year, till half the land is cleared, or pay 5l. for every acre not ſo cleared. That ſix-pence per acre be paid to the crown as a quit-rent on ſuch lands as ſhall be cleared. No perſon to purchaſe more than 300 acres of land in Dominica, or 500 in the other iſlands. That diſtricts will be allotted for towns; a penny per foot for ground-rent for tenements, and ſix-pence per acre for fields. No more than one town lot to one perſon, and ſix acres of paſture-land to each town lot; 800 acres in each pariſh to be reſerved for poor ſettlers, to be divided into lots of not leſs than 10, nor more than 30 acres each; to be granted in fee ſimple. The land to be occupied and entered upon in three months after the grant. No lands granted to poor ſettlers to be alienable by ſale or otherwiſe, for ſeven years, except for the children of the firſt ſettlers; and all mines of gold and ſilver to be reſerved to the crown. The ſale is to be in June next, if ſurveys can be made ſo ſoon.

In the ſale of Mr. Thoreſby's muſæum, the following medals and coins ſold as under.

	l.	*s.*	*d.*
The famous copper medal of col. Lilbourne — —	2	17	0
A Saxon penny of king Alfred's	4	1	0
Two pennys of Alfred and Ethelred	5	7	6
One Eactachius ———	4	10	0
One ditto, ſtruck at York —	8	8	0
One Stephen and Henry ——	3	7	0
Two groats of Richard III. ——	3	3	0
A proof piece for a penny of Henry VIII. —— ———	3	0	0
A Scarborough ſiege coin Char. I.	7	7	0
Ditto — —	7	2	6
A commonwealth ſixpence ——	3	4	0
A pewter Iriſh crown of James II.	5	7	6
A commonwealth farthing ——	3	6	0
Two farthings of Charles II.	3	4	0

Married.] The Rev. Dr. Nowell, principal of St. Mary Hall, Oxford, to Miſs Munday of Oxford. —— At Dublin, John Bourke, Eſq; member for Naas, to lady Mary Leeſon, eldeſt daughter of the earl of Miltown. — Capt. Powell, of lord Robert Manners's regiment, to miſs Digby of Bourn in Lincolnſhire, with 3000l. —— At Hardwick in Salop, Stanwell Griffiths, Eſq; to miſs Ambler of that place, with 5000l. —— Boddington, Eſq; merchant, to miſs Fremoux of Clapton. —— At Edinburgh, James Cathcart, Eſq; of Carbiſton, to miſs Colquhoun.

Died.] On the 6th inſt. in the 73d year of his age, the right hon. Philip York, earl of Hardwicke, viſcount Royſton, high ſteward of the univerſity of Cambridge, &c. At the age of 29, he was promoted to the office of ſolicitor-general.

On the 12th. the hon. lord viſcount Townſhend. He is ſucceeded in title and eſtate by the hon. George Townſhend, of Rainham, in the county of Norfolk. — The hon. George Cholmondeley, viſcount Malpas, eldeſt ſon of the earl of Cholmondeley. —— The right hon. the earl of Macclesfield, one of the tellers of the Exchequer, which place his

his lordſhip enjoyed upwards of forty years. —In the Eaſt-Indies, ſir George Chalmers, bart. long a reſident in thoſe parts. — The rev. ſir Nathaniel Edwards, bart. There being no male heir of the family, the title is extinct, but the eſtate goes to James Taylor, of Great Hadham in Hertfordſhire, Eſq; — In Mark-lane, Jennix Dry, eſq; who by his will has left the reſidue of his eſtate, which will be conſiderable, to the five following hoſpitals, viz. St. Thomas's, St. Bartholomew's, St. Luke's, the London, and Bethlem, and the London Workhouſe; and has appointed mr. James Green, attorney in Token houſe-yard, and mr. Phillips, haberdaſher in Gracechurch-ſtreet, executors of his will. — In Dean-ſtreet, Audley-ſquare, the hon. miſs Tracey, youngeſt ſiſter of lord Tracey. — At the Hague, aged 72, vice admiral Pieterſon.

Promoted.] The rev. mr. Peter Routh to the rectory of Beccles, in Suffolk. — The rev. mr. John Bevan, B. A. to the rectory of Mouliton, in the county and dioceſe of York. —— The rev. Peter Senhouſe, D. D. to hold the rectory of Heyford Warran, alias Upper Heyford, in the county and dioceſe of Oxford; with the rectory of Barnſley, in the county and dioceſe of Glouceſter. — The rev. mr. Evans, a prebend of Worceſter. — The rev. Beelby Porteus, M. A. to the rectory of Bucking, in Kent, and the rectory of Writteſham. — Denys Rolle, eſq; member for Barnſtaple, to be governor of Eaſt Florida. —— Rev. Henry Newcome, M. A. chaplain to the biſhop of St. Aſaph, to hold the rectory of Llany-Monech in the county of Salop, together with the rectory of Caſtle, Montgomery. — John Gray, eſq; of Richmond-hill, lord rector of the univerſity of Aberdeen. — John Hamilton, eſq; member for Wigtown, to be maſter of the works in Scotland — The rev. Charles Hall, D. D. to hold the rectory of Bocking, in Eſſex; and alſo the rectory of Southchurch. —— Alexander Mackay, eſq; colonel of the 63d regiment, in the room of lord Malpas, deceaſed. — The rev. mr. Joſ. Paine, D. D. to the rectory of Sutton in Wilts. — The rev. mr. Will. Summer, to the rectory of Hunton Stanton John's in Oxfordſhire. — The rev. mr. James Bailey, to the rectory of St. Mary in Manchester. — The hon. capt. Perceval, of the Ramilies guard ſhip, to the command of the Superb, going with troops to America.

B——KR——TS.

Feb. 28. Tho. Gilbert, late of the hamlet of Mile End New Town, in the pariſh of Stepney, Middleſex, cheeſemonger, dealer and chapman. — David Collins, of the city of Oxford, grocer. —— Alexander Elliot, of Brompton, Kent, ſhop-keeper. — Charles Price, of Gray's Inn Lane, brewer. — Tho. Roſe, of Witney, Oxfordſhire, grocer. — Ann Roberts, of Trowbridge, Wilts, linen-draper. —— Richard Davies, Leather-lane, London, cheeſemonger. —— John Hills, of Rocheſter, Kent, victualler.

Mar. 3. John Ferris Sherwood, late of St. Paul's Church-yard, London, mercer. — William Owens, of the city of Bath, Somerſetſhire, linen draper. — Thomas Twells and Thomas Porter, late of the town and county of the town of Nottingham, hoſiers. —— Alexander Strachan, of Friday-ſtreet, London, merchant. —— Robert Dallas, of Throgmorton-ſtreet, London, merchant. — John Upton, of Mancheſter, Lancaſter, dealer and chapman.

6. Jeſton Homfray, of Oldſwinford, in Worceſterſhire, merchant. — Richard Camplin and Daniel Smith, of the city of Briſtol, merchants. — James Bull, of Newbury, in Berks, dealer and chapman.

10. Jonathan Weetch, of Ratcliffe-croſs, in the county of Middleſex, linen-draper.

13. Dirk Vander Heyden, of Dowgate-hill, London, merchant. — James Harg, of Jermyn-ſtreet, in the pariſh of St. James, Weſtminſter, in the county of Middleſex, taylor. — Nicholas Dawes, of London, broker.

17. John Cox, of Swithin's-alley, near the Royal Exchange, London, haberdaſher. — Jane Cox, of Lombard-ſtreet, London, milliner and ſole trader, the wife of John Cox, of Sweeting's-alley, London, hatter. — John Jarratt, late of Hackney, Middleſex, brewer. —— James Straton, of Weſt-ſmithfield, London, druggiſt.

20. William Lintott, late of the town and port of Haſtings, in Suſſex, mercer and chapman. —— Charles Millan, of London, merchant. — Robert Caruthers, of Northwich, in the county palatine of Cheſter, linen-draper.

24. Thomas Hunt, late of Newport-ſtreet, Leiceſter-fields, Middleſex, hoſier. — Joſeph Daltera, of Briſtol, merchant. — Thomas Anderton, of Mancheſter, in the county of Lancaſter, bookſeller. —— James Browne, late of Meard's-buildings, in the pariſh of St. Anne's, Soho, dealer and chapman.

27. Benjamin Wright, late of Miles-lane, London, but now of Birmingham in the county of Warwick, hardwareman. —— James Rhodes, of Leeds in Yorkſhire, leather dreſſer. — Nathaniel Saunders, late of the city of Briſtol, butcher. — Robert Collie, of the pariſh of St. Martin in the Fields, Middleſex, vintner and victualler. — Adam Faitholme, of London, merchant.

Engraved for the **General Magazine** *for W. Owen, at Temple Bar.*

Plate I

The Ananas.

The GENERAL MAGAZINE,

For *APRIL*, 1764.

Among the many encouragers of this MAGAZINE, we have the pleaſure to find ſeveral LADIES, ſome of whom are eminently diſtinguiſhed for their fine accompliſhments: by the deſire of theſe LADIES we ſhall inſert their works, and particularly the following account of a LADY remarkable for her reſearches in NATURAL HISTORY: and we take this opportunity to return thanks to our fair correſpondents for their kind hints, and ſhall, with the ſame pleaſure, endeavour to merit their future favours.

The EDITORS.

MARIA SYBILLA MERIAN applied herſelf from her youth to the examining of inſects: ſhe made her firſt obſervations on ſilk-worms, at Francfort upon the Maine her native country; and collected as many caterpillars as ſhe could find, to ſtudy the transformation of them. That ſhe might make her remarks with greater exactneſs, ſhe forſook all company, and applied herſelf to drawing, in order to paint theſe inſects from nature. By this means ſhe collected and painted on parchment all thoſe ſhe could diſcover at Francfort and Nuremburg. Some of the curious having ſeen this collection, adviſed her to give the public the obſervations ſhe had made upon inſects, for the ſatisfaction of naturaliſts: ſhe followed their advice, and publiſhed the firſt part of them in quarto, in the year 1679, and the ſecond in 1683, having engraved the plates herſelf. She afterwards went over to Frieſland and to Holland, where ſhe continued her remarks upon inſects, but ſhe met with none ſo curious as thoſe that came from the Eaſt and Weſt Indies; eſpecially, after having ſeen the cabinet of the illuſtrious Mr. Nicholas Witſen, Burgomaſter at Amſterdam, and director of the Eaſt India company; and that of Mr. Jonas Witſen, ſecretary of the ſame city. She alſo inſpected the cabinet of Dr. Frederic Ruyſch, profeſſor of anatomy and botany; and finally that of Mr. Levin Vincent, and ſeveral others; in which ſhe found a great number of inſects, whoſe origin and propagation were nevertheleſs entirely unknown; that is to ſay, the manner in which they are transformed into a variety of animal ſhapes. 'Twas this made her undertake a long voyage to Surinam in America, from whence the above gentlemen had received the greateſt part of their inſects. She ſet out in the month of June 1699, and ſtayed in that country about a year, that ſhe might carefully make her obſervations, and then returned to Holland, where ſhe arrived the 23d of September, 1701, having not been able to remain at Surinam ſo long as ſhe had intended becauſe of the heat of the climate, which greatly hurt her conſtitution.

ſtitution. She then publiſhed her remarks in Latin and French, not only on the inſects of Surinam, but alſo concerning the plants upon which they are found, with copper-plates elegantly engraved.

Transformation of the INSECTS *of* SURINAM.*

The Ananas, or Pine-apple, being the choiceſt fruit that is eaten, it may very well deſerve the firſt place in this work and in the order of my obſervations. The firſt plate repreſents it in its bloſſom, and in the ſecond it appears as when it is ripe. The ſmall leaves ſtreaked with various colours, which are under the fruit, reſemble a red ſattin ſpecked with yellow; the little ſprigs which are on the ſide continue to grow when the fruit has been gathered. The leaves are long; on the outſide they are of a ſea green colour, and on the inſide of a meadow-green; the edge of them appears reddiſh, and is filled with ſtrong points. Several learned men have ſpoken at large concerning this fruit, which is as beautiful to the ſight as it is agreeable to the taſte. Piſo and Maregrave have treated of it in the hiſtory of Braſil, Recede in the 11th part of the Hortus Malabaricus, Commelin in the firſt part of the Hortus Amſtelodam. &c. Therefore I ſhall ſpeak of it no further, but paſs to my obſervations on inſects.

The Kakerlacs are, of all the inſects in America, thoſe which are the moſt known, becauſe of the injuries the inhabitants ſuſtain by them: they gnaw their cloths and woollen ſtuffs, and ſpoil their meat and drink. They love eſpecially ſweet things, and for that reaſon have an extraordinary inclination for the Ananas. They lay their ſeed in a heap, and cover it round with a fine thread, as do ſome ſpiders in Europe. As ſoon as their eggs are in maturity, and the young ones are formed in them, they themſelves break the ſhell and come out in great haſte; and as theſe young Kakerlacs are no bigger than an ant, they eaſily creep through the chinks, or locks, into the boxes and drawers, where they gnaw and deſtroy every thing. At laſt they grow as big as that which is repreſented in the firſt plate, of a brown greyiſh colour. As ſoon as they have acquired their greateſt ſize, their ſkin being divided upon their back, a winged Kakerlac, ſoft and white, comes out of it; its old ſkin reſembles a Kakerlac, but there is nothing in the inſide of it.

On the other ſide of the fruit is ſeen another ſort of Kakerlacs, which carry their eggs under their belly in a little brown bag; which it quits as ſoon as one touches the animal, that it may ſave itſelf with more expedition, and young ones come out of that bag, which receive the ſame transformations as thoſe we have juſt mentioned, without any difference.

To

* Surinam, the chief ſettlement of the Dutch in Guinea in South America. The colony is very powerful, and its principal trade conſiſts in ſugar, cotton, gum, tobacco, wood for dying, &c. it lies in latitude 6° 34′ north, longitude 56° 22′ weſt.

To the AUTHORS *of the* GENERAL MAGAZINE.

On CONJUGAL LOVE.

Σωματα μεν δυο, Ψυχη δε μια. PYTH.

OF all the pleaſures that endear human life, there are none more worthy the attention of a rational creature, than thoſe which flow from the mutual return of *conjugal love*; our great poet MILTON, after he has deſcribed the nuptial bower of ADAM and EVE in *Paradiſe*, thus calls upon that bliſsful ſtate:

" Hail wedded love! myſterious law, true ſource
" Of human offſpring, ſole propriety
" In Paradiſe, of all things common elſe.
" By thee adult'rous luſt was driven from men,
" Among the beſtial herds to range; by thee
" (Founded in reaſon, loyal, juſt, and pure,)
" Relations dear, and all the charities
" Of father, ſon, and brother firſt were known.—
" —Perpetual fountain of domeſtic bliſs!—
" Here love his *golden* ſhafts employs; here lights
" His *conſtant* lamp, and waves his purple wings.

In this ſcene the looſer paſſions of youth are conſolidated into a ſettled affection; for the lawful object of love unites every care in itſelf; and makes even thoſe thoughts that were painful before, become delightful. When two minds are thus engaged by the ties of reciprocal ſincerity, each alternately receives and communicates a tranſport that is inconceivable to all but thoſe that are in this ſituation; from hence ariſes that heart-ennobling ſolicitude for one another's welfare, that tender ſympathy that alleviates affliction, and that participated pleaſure that heightens proſperity and joy itſelf. This is a full completion of the bleſſings of humanity! for if reaſon and ſociety are the characteriſticks which diſtinguiſh us from other animals, an excellence in theſe two great privileges of man, which centers in wedlock, muſt raiſe in us happineſs above the reſt of our ſpecies. It is here that the nobleſt paſſions of which the human ſoul is ſuſceptible join together, virtuous love and friendſhip; the one ſupplying it with a conſtant rapture, and the other regulating it by the rules of reaſon. I would not be underſtood to be ſpeaking here of thoſe unnatural and diſproportionable matches that are daily made upon worldly views, where intereſt, or luſt are the only motives; I mean that ſuch only enjoy the bleſſing, who are conducted by Hymen through his own realms of innocence and ſincerity. A gentleman who is very happy in a *beautiful friend*, as a certain Engliſh poet calls a wife, and is a kind of an enthuſiaſt for the married ſtate, told me the following ſtory of an Italian pair, who were famous for their unalterable conſtancy and affection. There lived at Genoa a young noble-

man named MARINI, who had a large eſtate in the iſland of Corſica, whither he went every five or ſix years to regulate his affairs. At the age of five and twenty he was married to a beautiful lady, the daughter of a Venetian ſenator, called MONIMIA, who had refuſed the greateſt matches in Italy, to prefer the fortunate MARINI. As their marriage was founded upon a mutual eſteem, their paſſion encreaſed inſtead of diminiſhing by enjoyment, till they became an example of conjugal duty to all that knew them. They had lived many years in this uninterrupted ſtate of felicity; when MARINI was obliged to make a voyage into Corſica, which was then diſturbed by a rebellious inſurrection, in order to ſecure his patrimony, by encouraging his dependents to ſtand firm in defence of their country. But the greateſt affliction, and which abſorbed all the reſt, was his being neceſſitated to part for a while from MONIMIA, who being then very big with child was incapacitated to go with him as uſual. When the fatal time of parting was come, they embraced with the utmoſt grief, and the warmeſt prayers to Heaven for one another's ſafety. As ſoon as this afflicting ſcene was over, MARINI embarked, and having a fair wind, arrived ſafe at Baſtia in a few hours. The ſucceſs of the rebels being ſtopped, and the affairs of the iſland a little ſettled again, our lover began to prepare for his return to Genoa; but as he was walking one day by the harbour where the ſhips of burden lay, he heard two ſailors who were juſt arrived, talking of the death of a Genoeſe nobleman's wife then abſent from the republic. This caſual circumſtance greatly alarmed him, and excited his curioſity to liſten farther to their converſation, when after a little pauſe, he heard one of them mention the name of his dear MONIMIA; at theſe words his ſurprize and affliction was ſo great that he had not power to follow the mariners to ſatisfy his doubt, but inſtantly ſwooned away, and when he recovered, found himſelf ſurrounded by his own ſervants lamenting over him. At the ſame time that this happened to MARINI, ſomething of the ſame nature equally diſtreſſed MONIMIA; for an imperfect account came to Genoa, by the captain of a Venetian veſſel, that a gentleman named MARINI had been ſurprized near Baſtia by a remaining party of rebels, and that he and all his attendants were killed by them. Theſe two accounts involved our unfortunate pair in the greateſt diſtreſs: they immediately took ſhipping in order to be convinced of what they ſo much dreaded to know; the one for Corſica, the other for Genoa. They were both ſailed when a violent ſtorm aroſe which drove their veſſels upon a little iſland in the Mediterranean. MARINI's ſhip landed firſt, where, whilſt the reſt of the crew were refreſhing themſelves, the inconſolable widower, as he thought himſelf, wandered with one ſervant only into a little wood that was near the ſea-ſhore to give a looſe to his immoderate grief. Soon after the Genoeſe ſhip landed too, and the ſame motive led MONIMIA with one of her maids into the wood where her huſband was, lamenting his unfortunate condition. They had not been there long before they heard each other's

other's complaint, and drew nearer mutually to ſee if there was any wretch living equally miſerable with themſelves. But how great was the aſtoniſhment of both, when they met in a little path and ſaw each other! the immoderate joy was ſuch, and the tranſition from one extreme to the other ſo inſtantaneous, that all the power they had was to fall into each other's arms, where they expired in a few minutes after. Their bodies were conveyed to Italy, and were interred with all the ſolemnity and magnificence due to their quality and eminent virtues.

To the EDITORS *of the* GENERAL MAGAZINE.

SEveral gentlemen of the law deſire you will inſert the incloſed, that that ſcience may receive thoſe advantages which others have, by the joint endeavours of the learned, in your magazine.

A. Z.

The Editor is much obliged to his correſpondent, and begs leave to aſſure the above gentleman, and all others of the profeſſion, who are pleaſed to favour them with their thoughts or obſervations, that due attention ſhall be paid them.

On the LAWS *of* ENGLAND.

CASE.

June 1737. T. B. made his will, and thereby gave the following legacies, "Item. I give to the poor of the pariſh where I die 500l." and he deſires that he may be buried, if he dies within ten miles of London, in Bunhill-fields. After the making this will the teſtator left London, where he then reſided, and went over to Holland, to make a tour, but was taken ill on the road, and died at the Ham in Vine-ſtreet, Roterdam.

His executor and reſiduary legatee has proved his will, and the 500l. have been demanded on behalf of the poor at Roterdam, as alledged.

Roterdam is not divided into pariſhes as England is; and the Ham in Vine-ſtreet, Roterdam, is no pariſh, there the poor are not provided for by pariſhes but by the magiſtrate, and there is not, properly, any poor of the pariſh, there being no diſtrict of that appellation, nor any churchwardens or overſeers of the poor as in England.

Q. 1. If this legacy be not lapſe or adempt for want of a proper deſignation or capacity in any perſons to take? If not, how and by whom is it recoverable?

A. It is a general rule of the civil law, that a wrong deſignation does not deſtroy the legacy; the law is more particularly favourable in the conſtruction of charitable legacies in order to ſupport them. Although in the preſent caſe the Ham, in Vine-ſtreet, Roterdam, be not a pariſh, or within a pariſh, yet I conceive the word pariſh will be conſtrued to mean the place or diſtrict where he ſhould die, and the legacy be intended for the poor of that place, and that the magiſtrates of the

place,

place, who have the care of the poor, may appoint a ſyndick to ſue for and recover the ſaid legacy.

J. ANDREW.
A famous civilian of that time.

Q. 2. Suppoſing the teſtator had died in a foreign pariſh, as he might have done in France; would this legacy have been recoverable here by bill in equity, at the ſuit of the church-wardens of ſuch foreign pariſh, as it might have been in caſe the teſtator had died in a pariſh in England?

A. Foreigners are capable of a perſonal legacy, and an eccleſiaſtical court would not, I think, vary from the words of the legacy, or make any reſtriction where it is left general to the poor of the pariſh; and in caſe the teſtator had died in a pariſh in France, the æconomi or curate, who have the diſpoſal of money given to the poor, might ſue for it: poſſibly a court of chancery might reſtrain it to the poor who are Britiſh ſubjects being or reſiding there, if there were any ſuch.

J. ANDREW.

Sir John Strange, late maſter of the rolls, his opinion on the above two queſtions.

If there is at Roterdam any pariſh in the nature of a pariſh in England, I am of opinion, they are intitled to the legacy of 500l. and that a bill in equity is the proper way to recover it in the names of the church-wardens or guardians on behalf of the poor of that pariſh.

CASE.

By ſtat. 5 Geo. 2. c. 30. intituled "An act to prevent the committing of frauds by bankrupts," it is enacted that in caſe any commiſſion of bankruptcy ſhould iſſue againſt any perſon who, after 24th June, 1732,

"Should have been diſcharged by virtue of that act,
"Or ſhould have compounded with his creditors.
"Or delivered to them his eſtate and effects and been releaſed by them;
"Or been diſcharged by any act for the relief of inſolvent debtors.

That in any of theſe caſes the body only of ſuch perſon, obtaining his certificate ſhould be freed by virtue of this act, but the future eſtate and effects of every ſuch bankrupt ſhould remain liable to his creditors, as before the making this act, unleſs the eſtate of ſuch bankrupt ſhould produce a clear dividend of 15 s. in the pound.

In the year 1743, one W. M. became a bankrupt, and a commiſſion iſſued againſt him; but he being willing to deliver his eſtate and effects to his creditors, the commiſſion was ſuperſeded, and the ſaid W. M. aſſigned his eſtate and effects and delivered the ſame to his creditors, in ſatisfaction of their debts, and thereupon was releaſed by them, and the effects ſo delivered raiſed a dividend of 9 s. 6 d. in the pound and no more.

In June, 1748, the ſaid W. M. became bankrupt again, and a ſecond commiſſion iſſued, and hath been gone through, and he hath obtained his certificate, but his eſtate is not ſufficient to divide 15 s. in the pound.

S. M.

S. M. the bankrupt's brother, was a creditor, and proved a large debt under the ſecond commiſſion, but, before any dividend made, died, and by his will appointed the bankrupt his executor, gave him his real eſtate for life, and made him reſiduary legatee, and he has proved the will and poſſeſſed himſelf of effects ſufficient, as is thought, to pay all his debts, with a conſiderable overplus.

The aſſignees, under the ſecond commiſſion, have divided only 10s. in the pound, but conceive they have a right to recover againſt the bankrupt the remainder of their debts out of his future eſtate and effects, which he has poſſeſſed by virtue of his brother's will, notwithſtanding his ſaid certificate, becauſe as he had, in manner before ſtated, aſſigned his eſtate to his creditors, and been diſcharged by them, his future eſtate ſtill remains liable to his creditors.

The bankrupt alledges, that his certificate is a full diſcharge, for as the firſt commiſſion was ſuperſeded, it is to be conſidered as if no commiſſion had iſſued, and therefore, not only inſiſts upon being freed from his creditors, but alſo demands of the aſſignees the dividend of 10s. in the pound on the debt he owed his brother, proved as aforeſaid, under the commiſſion; the aſſignees anſwer to this, that they do not inſiſt upon avoiding the force of the certificate under the caſe ſtated in the act of parliament, of a former commiſſion having iſſued, but on the bankrupt's having, before the preſent commiſſion and after the 24th June, 1732, aſſigned his eſtate and effects to his creditors, and been by them diſcharged.

Q. In this caſe is the bankrupt's certificate ſufficient to diſcharge his future effects, and to entitle him to the dividend on his brother's debt, or have the creditors any remedy againſt the ſaid future effects: If they have, what proceeding either at law or in equity will be the moſt proper to enable them to recover the remainder of their debts?

A. The bankrupt having been before diſcharged by his creditors, on delivering up his effects, is, I conceive, within the proviſion where his certificate does not diſcharge his future effects; and as his future eſtate is left on the foot of the old laws, of which the 13 Eliz. gives expreſs power to the commiſſioners to diſpoſe of the future eſtate of a bankrupt, I think the commiſſioners may in the preſent caſe make an aſſignment of W. M's new eſtate, and the aſſignees may recover it by action, as they may any former eſtate, and his brother's dividend will belong to the aſſignees.

D. RYDER.

I think that the firſt commiſſion being ſuperſeded, it muſt be looked upon as abſolutely null and void: So the ſecond commiſſion muſt be looked upon, as to the certificate, as the firſt commiſſion; and by the 5 Geo. 1. a certificate entirely clears a bankrupt under a firſt commiſſion, and gives him a capacity to take future real or perſonal eſtate to his own uſe; ſo that this ſecond commiſſion being the firſt commiſſion in effect, the firſt being ſuperſeded, the certificate will clear him, whereas

whereas if this ſhould be eſteemed a ſecond commiſſion, the certificate would not clear him, but his future effects would be liable to his creditors; and therefore, I think that the bankrupt, as executor of his brother's will, is entitled to receive the preſent or any future dividend, under the ſecond commiſſion, for the debt of the teſtator, becauſe he ſtands in his place; and being capacitated to take future effects his right can't I think be controverted by the aſſignees, and I think that the real or perſonal eſtates, which have thus veſted in the bankrupt will not be liable to his creditors under the commiſſion.

R. WILBRAHAM.

The ſaid W. M. being reſident at Norwich, ordered a parcel of goods to be ſent to him by ſea from London, by one J. G. a trader there: and ſome ſhort time before the bankruptcy, J. G. ſent the goods on board a ſhip in the river Thames, on the account and riſque of the bankrupt, and ſent him an invoice thereof; but before the goods arrived W. M. became a bankrupt, and J G. found means to ſtop the goods, and has got poſſeſſion of them again.

The aſſignees inſiſt, that theſe goods being ſhipped on the bankrupt's riſque, the property was altered by the ſhipping, and became veſted in the bankrupt; and that if they had been loſt in the voyage at ſea J G. might have proved his debt under the commiſſion; but J. G. inſiſts that as he has ſtopt or regained his goods, as it were in tranſition, he has a right to retain them; and that a like caſe has been lately determined by the lord chancellor Hardwicke.

Q. Can the aſſignees recover theſe goods againſt J. G. or not?

A. I think they may recover them by action at law.

D. RYDER.

As theſe goods, ſent by J. G. never came to the hands of the bankrupt, but were ſtopt in *tranſitu*, and prevented from coming to him; I think that the property of them was never altered, nor veſted in the bankrupt, but ſtill remained in J. G. and this point has been lately determined by lord chancellor Hardwicke, and therefore I think that J. G. can't be compelled to deliver theſe goods to the aſſignees.

N. B. This point will depend, in ſome meaſure, upon the riſque which was run by J. G. or by the bankrupt; if the bankrupt ordered theſe goods to be ſhipped, and he run the riſque of the ſeas, then, the property, I incline to think did veſt in the bankrupt by the ſhipping of the goods.

R. WILBRAHAM.

AS many of your readers may be deſirous of knowing why a member of parliament cannot be made a bankrupt, eſpecially as one of the moſt eminent of the law has been pleaſed to declare it as his opinion that he may, give me leave to offer them ſuch reaſons as have occurred to me upon examining the ſubject,

Moſt

Moſt of the acts of bankruptcy ſeem to be at the option of the party; that is, whether he will commit them or not; as for inſtance; abſconding, denying himſelf to his creditors, making fraudulent aſſignments and many others, which beſides, muſt be done for fear of being arreſted, and in order to defeat or delay his creditors of their juſt debts, therefore, as a member of parliament cannot be arreſted, no body will preſume to ſay (that if he ſhould be weak enough to abſcond or deny himſelf, for the law does not oblige him to do either) that he did them to avoid being arreſted, or with intention to defeat or delay his creditors, becauſe during the ſeſſion of parliament and for ſome time after, no proceedings whatſoever can be had againſt the members thereof.

There are indeed two compulſory acts of bankruptcy, either of which the party will be guilty of if he does not pay his debts, theſe ſeem to be the moſt efficacious ones, but yet will not reach members of parliament, for as a *Capias* will not lie againſt them they cannot be arreſted, and unleſs they are arreſted they cannot commit the acts of bankruptcy alluded to, viz. "lying in priſon two months," or "ſuffering themſelves to be outlawed."

Thus you ſee that a man who is inclined to avoid the payment of his debts, may do it either by refuſing to become a bankrupt, or by becoming a bankrupt againſt the conſent of his *juſt* creditors; a member of parliament is an inſtance of the firſt ſort; a man by having a friendly commiſſion (as 'tis called) taken out againſt him has oftentimes been an inſtance of the other, he has nothing to do but to compute what will make number and value, and manage his debts and his friends accordingly.

It has been ſaid that you cannot oblige a member of parliament to ſubmit to be examined before the commiſſioners, till the 42d day, and that according to a late opinion of the firſt authority he is not obliged to finiſh it even then; if ſo, the party may have collected in all his debts, (for he may ſue though he cannot be ſued) while the practicability of making him a bankrupt was under conſideration, and be ready to leave the kingdom immediately on the iſſuing of the commiſſion. In anſwer to this, I obſerve, that the commiſſioners may, nay ought, upon their declaring him bankrupt, certify his being ſo, in which certificate, I would adviſe the ſetting forth the proof whereon he was declared a bankrupt, that it may appear to be a clear, indiſputable act of bankruptcy: upon this certificate any juſtice of the peace will grant a warrant, for it is abſurd to ſay a man who is duly declared a bankrupt, who is diveſted of all eſtate both real and perſonal, ſhall notwithſtanding continue *qualified* to be a member of the parliament of Great Britain.

POOR LAWS.

THE ingenious Dr. Burn in his hiſtory of the poor laws, page 120, ſays, it is affecting to humanity to obſerve the various methods that have been invented for the puniſhment of *vagrants*, that this part of our hiſtory looks like the hiſtory of the ſavages in America, al-

moſt all ſeverities having been exerciſed againſt *vagrants*, except ſcalping, and then the author enumerates their puniſhments.

Viz. 1. Binding to good behaviour. 2. Commitment to goal. 3. Putting in the ſtocks. 4. Feeding on bread and water only. 5. Whipping till their bodies are bloody. 6. Pillory. 7. Cutting off ears. 8. Guilty of felony, *without benefit of clergy*. 9. Marking with an hot iron on the breaſt, with the letter V, and adjudged to be ſlaves to the perſon apprehending them, giving them only bread and water, and ſuch refuſe of meat and drink as he ſhould think fit; and cauſing them to work by beating, chaining, or otherwiſe, in ſuch work and labour (how vile ſoever) as he ſhould put them unto. 10. Marking on the forehead, or ball of the cheek, with the letter S, and adjudged to be the maſter's ſlaves for ever. 11. To be ſold or deviſed by will as other goods and chattles. 12. To be burnt through the griſtle of the right ear with an hot iron of the compaſs of an inch about. 13. To be ſtripped ſtark naked from the middle upwards, and whipped. 14. To be baniſhed the realm. 15. To be adjudged perpetually to the *gallies* of *this* realm. 16. To be branded in the left ſhoulder with an hot iron of the breadth of a ſhilling with the letter R, ſo as that the letter may be ſeen and remain for a perpetual mark on them during life. And laſtly, to be ſent to the houſe of correction, and kept to hard labour.

As vagrants are liable to many of the above puniſhments at this day, I out of curioſity, conſulted the vagrant act of 17 Geo. 2. c. 5 for their deſcription, and if deſcription alone is ſufficient to warrant the proceedings of a juſtice of peace, it is ſo extenſive, and withal ſo various that I fear every man in the kingdom will be within ſome part of it. I feign would know the man who having the misfortune to diſoblige a juſtice of the peace can be ſure of not being whipt or ſent to bridewell by his conſtruction of this deſcription of the act: among its enumerable objects are the following ones, on which I beg leave to make ſome obſervations, and, flatter myſelf, they will prove entertaining, as well as uſeful to the reader. And

Fencers.

I would, out of the regard I have to my countrymen, adviſe them for their ſafety to leave off wearing ſwords, for fear they ſhould be adjudged to come within this deſcription of the act.

2. Minstrels.

It may not be improper to caution his majeſty's ſubjects againſt playing upon the violin, fiddle, or other muſical inſtrument, leſt they ſhould be deemed within the above deſcription of the act: as to my worthy country men the muſicians ſome of whom have been at the charge of taking a doctor's degree in the univerſity, I cannot help being truly concerned for them, for their caſe ſeems full as bad as that of the players of interludes, eſpecially thoſe who have turned their hands to playing the organ, for they may be apprehended every Sunday committing acts of vagrantcy in moſt of the pariſh churches about town.

3. All

3. All perſons uſing any ſubtil craft to deceive and impoſe on any of his majeſty's ſubjects.

This deſcription ſeems to take in whole profeſſions, ſuch as politicians, lawyers, phyſicians, and traders.

4. All perſons playing or betting at any unlawful games or plays.

How many of the nobility and gentry may be included under this deſcription I cannot determine; but I am ſure any one may with truth aſſert, that all ſuch are equally liable to be whipt or ſent to bridewell if a juſtice of the peace ſhall think fit, as any player being otherwiſe an honeſt man, an houſe holder, or of ability to maintain himſelf.

Extract from the acts of parliament paſſed in the fourth *year of the reign of king* George *the* third.

It ſeems not altogether foreign to this ſubject, to obſerve the great improvements made in printing the ſtatutes paſſed in this reign, viz. by placing the chapter at the head of each act, and I would recommend the chapter being continued at the corner of the page, and alſo to ſection every ſingle act, in the ſame manner as the ſtatutes at large, paging ſeems to be of no uſe at all, and ſectioning of the greateſt, I would likewiſe adviſe the adding the chapters oppoſite to the pages in the table to the acts, and in the contents to the abſtract, or rather inſtead of pages to either; and when an act is referred to in the margin, the chapter as well as the year of the king, ſhould be inſerted.

BY ſtat. 4 Geo. 3. chap. 7. ſect. 1. after the fifth day of July 1764, inſtead of ſix week limited by ſtat. 3 Geo. 3. chap. 1. for the payment of the duty on cyder and perry, ſix kalendar months are allowed, to be computed from making the charge thereof.

By ſect. 2. in lieu of the former compoſition of 5s. in private families, ſhall be paid the ſum of two ſhillings *per* head *per annum* for each perſon of eight years old and upwards, in the liſt directed to be delivered by this act, which compoſition is to be renewed annually, and in caſe of an encreaſe in the family during the year, an additional liſt is to be given in, and two pence *per* month paid for every perſon added during the ſubſiſting unexpired term of ſuch year.

By ſect. 4. no proprietor of any cyder mill, &c. which ſhall be let out, or lent, for making cyder, ſhall be obliged to give any notice of letting, or lending ſuch mill, &c. or of making cyder or perry therewith, by the perſon to whom the ſame ſhall be ſo let or lent.

By CHAP. 9. the duty of one penny for every beaver ſkin imported, and ſeven pence for every one exported, and one ſhilling and ſixpence for every pound weight of beaver wool or wombs exported, and no more ſhall be paid after the *ſeventh* of *April*, 1764, and the former duties upon the importation of them from thenceforth ſhall ceaſe.

By CHAP. 10 after the *fifth* day of *May* 1764, the barons of the *Exchequer*, upon affidavit and petition ſhall diſcharge recognizances by

order without any *quietus*, for which order no more than one guinea ſhall be taken; but debts due to the crown, caſes of fraud by contraband trade, and aſſaulting officers of the revenue are excepted.

By CHAP. 11. the following ſtatutes are continued to 29 September 1771, viz. ſtat. 9 Geo. 2. chap. 37, intitled "an act for further encouraging and regulating the manufacture of Britiſh ſail-cloth, and for the more effectual ſecuring the duties now payable on foreign ſail-cloth imported into this kingdom; ſtat. 4 Geo. 2. chap. 29, intitled "an act for granting an allowance upon the exportation of Britiſh made gunpowder." Stat. 8 Geo. 1. chap. 12, intitled "an act for giving further encouragement for the importation of naval ſtores, and for other purpoſes therein mentioned:" ſo much of ſect. 2. as relates to the importation of wood, timber, and lumber from the Britiſh plantations in America.

By CHAP. 12. ſtat. 3 Geo. 1. chap. 13. intitled "an act for the better regulating of pilots for conducting of ſhips and veſſels from Dover, Deal, and the iſle of Thanet up the rivers of Thames and Medway, and ſtat. 7 Geo. 1. chap. 21. ſect. 14. for further regulating the pilots of Dover, Deal, and Thanet, &c. are continued to 25th March, 1778, and the following ſtatutes are continued to 29th September, 1771, viz.

By ſect 2. ſtat. 15 Geo. 2. chap. 25, intitled "an act to impower the importers or proprietors of rum, or ſpirits of the Britiſh ſugar plantations, to land the ſame before payment of the duties of exciſe charged thereon, and to lodge the ſame in ware-houſes at their own expence, and for the relief of *Ralph Barrow*, in reſpect to the duty on ſome rock ſalt, loſt by the overflowing of the rivers Weaver and Dane."

By ſect. 3. ſo much of ſtat. 19 Geo. 2. chap. 34. intitled "an act for the further puniſhment of perſons going armed or diſguiſed in defiance of the laws of cuſtoms or exciſe; and for indemnifying offenders againſt thoſe laws upon the terms therein mentioned; and for relief of officers of the cuſtoms in informations upon ſeizure, as relates to perſons going armed or diſguiſed in defiance of the laws of cuſtoms and exciſe.

By ſect. 4. ſtat. 12 Geo. 2. chap. 30, intitled "an act for granting a liberty to carry ſugars of the growth, produce, or manufacture, of any of his majeſty's ſugar colonies in America, from the ſaid colonies directly to foreign parts, in ſhips built in Great Britain, and navigated according to law."

By ſect. 5. if any perſon ſhall maliciouſly damage or deſtroy any banks, floodgates, ſluices or other works, or open any floodgate belonging to rivers and ſtreams made navigable by act of parliament, for maintaining the navigation, or do any other wilful miſchief, to ſuch navigation, ſo as to prevent the carrying on the ſame, he ſhall be guilty of felony and be tranſported for ſeven years.

By CHAP. 24. ſo long as the revenue of the Poſt-office ſhall continue to make a part of the aggregate fund, no letters or packets ſhall be exempted

empted from payment of poſtage, except as follows, *viz.* All ſuch as ſhall be ſent from or to the King; and ſuch, not exceeding two ounces in weight, as ſhall be ſent during the ſeſſion of parliament, or within *forty* days before or after any ſummons or prorogation, and be ſigned on the outſide by a member of either houſe, and the whole of the ſuperſcription to be of ſuch member's hand writing; or, directed to a member, at his uſual reſidence, or place where he ſhall then be, or at either houſe of parliament: and, in like manner, all letters and packets ſent from and to places in Ireland, during the ſeſſion there, or within *forty* days before or after any ſummons or prorogation, ſigned and directed as aforeſaid: alſo all letters and packets to the lord high treaſurer, or commiſſioners, and ſecretaries to the treaſury; lord high admiral, commiſſioners and ſecretaries to the admiralty; principal ſecretaries of ſtate, and their under ſecretaries; commiſſioners for trade and plantations, or their ſecretaries; ſecretary at war, or his deputy; lieutenant general, or other chief governor or governors of Ireland; or their chief ſecretary, or ſecretary for the provinces of Ulſter and Munſter; their ſecretary reſiding in Great-Britain; the under ſecretary and firſt clerk, in the office in Ireland of the chief ſecretary, and the firſt clerk in the office of the ſecretary for Ulſter and Munſter; the poſt-maſter general, or deputy for Scotland, Ireland, and America; the ſecretary or deputy of the poſt-maſter general; farmer of the bye and croſs road letters; ſurveyors of the poſt-office; and letters and packets ſent from any of the ſaid officers, ſigned by them on the ontſide, and the whole ſuperſcription of their hand-writing; and letters and packets from the treaſury, admiralty office, office of the ſecretaries of ſtate, plantation office, war office, general poſt office at London, chief offices at Edinburgh, Dublin, and America, indorſed for the king's ſervice, and ſealed with the ſeal of office or of the principal officer in the department.

By ſect. 2. Commiſſioners of the treaſury, and admiralty, the ſecretaries of ſtate, commiſſioners for trade and plantations, ſecretary at war, poſt-maſter general and his deputies, impowered to authorize certain perſons in their reſpective offices, of whom liſts to be tranſmitted to the general poſt office, London, to indorſe the letters and packets upon the king's ſervice, and ſeal the ſame with the ſeal of office, &c. none to be ſo indorſed and ſealed, but by direction of their ſuperior officer, or which concerns the buſineſs of the office, on forfeiture of 5l. for the firſt offence, to be recovered and applied as by ſtat. 9 *Annæ*, chap. 10. ſect. 17. is directed; and for the ſecond offence, the offender to be diſmiſſed.

By ſect. 3. Perſons appointed to make ſuch indorſements, not to exceed two in any office, admiralty and war office excepted; and in the admiralty not to exceed eight in time of peace, and twelve in time of war; and in the war office, not to exceed ſix in time of peace, and ten in time of war.

By ſect. 4. Where any privileged perſon, diſabled from writing the whole ſuperſcription, ſhall authorize ſome perſon to ſign his name upon,

and

and write the ſuperſcription, and give notice thereof under his hand and ſeal to the poſt-maſter general; letters and packets, ſo ſigned and ſuperſcribed, ſhall go free.

N. B. This clauſe is omitted in the notice which has appeared in the public papers, by Command *of the poſt-maſter general.*

By ſect. 5. Printed votes, and proceedings in parliament, and news papers, ſent without covers, or in covers open at the ſides, and ſigned on the outſide by a member, or directed to a member, according to notice given by him to the poſt-maſter general, or his deputy at Edinburgh or Dublin, are to go free.

By ſect. 6. Clerks in the offices of the ſecreteries of ſtate, and poſt office, being duly licenſed, may continue to frank the votes, and proceedings in parliament, and news papers, as heretofore; ſending the ſame without covers, or in covers open at the ſides.

By ſect. 7. Poſt-maſter general, and officers under him, may ſearch any packet ſent without a cover, or in a cover open at the ſides; and if they ſhall find any other paper or thing incloſed therein, or there ſhall be any writing, other than the ſuperſcription upon the printed paper, or cover, the whole of ſuch packet is to be charged with the poſtage.

By ſect. 8. If any perſon ſhall, after the 1ſt of June, 1764, counterfeit the hand-writing of any perſon in the ſuperſcription of any letter or packet, to avoid the poſtage, he ſhall be adjudged guilty of felony, and be tranſported for ſeven years.

[*The acts of parliament will be continued in our next.*]

The art of dying in ſilk. By M. MACQUER.

THE whole art of dying conſiſts in extracting the colouring parts which different bodies contain, and transfering them to ſtuffs, in ſuch ſort that they ſhall be affixed to them in the moſt laſting manner poſſible; it ſhould ſeem therefore at the firſt view, that to die ſtuffs, it would be ſufficient, by the means of water to extract the colour of the ſeveral ingredients capable of furniſhing it, and to dip or boil in the water ſo charged with colours, the ſtuffs intended to be died; and yet ſuch a practice will hold good but in a very ſmall number of dies, the reſt requiring particular ways of management and preparation, either of the colouring ingredients, or of the ſubſtances to be died.

To caſt a light upon this matter, and put the reader in a way to underſtand the theory of the proceſſes employed in dying ſilks, M. Macquer in the firſt place lays down ſeveral propoſitions relative to the analyſis and principle of vegetables.

When any vegetable is boiled in water, there is thereby produced a ſeparation of the principles contiguous to the water, which becomes charged with as many of them as it is capable of diſſolving, leaving thoſe which it does not touch, as they were.

The principles which the water takes up are mucilages, gums, ſalts, and an oleous matter combined with ſalts which render it miſcible with water; it therefore might properly be denominated a ſaponacious ſub-

ſubſtance. Mr. *Macquer* calls all theſe ſubſtances confounded together, *extractive matter*, though he afterwards diſtinguiſhes this extractive matter into ſeveral kinds, according to the nature of their prevailing ſubſtances.

The principles of vegetables which water will not diſſolve, are their oily, reſinous, and earthy parts moſt deſtitute of ſalts.

Now this ſeparation by water, of the contiguous principles of vegetables, is never abſolutely entire and perfect; the oily, reſinous and earthy principles, which it acts not at all upon, ſecures a portion of thoſe ſubſtances, of which it is the diſſolvent, againſt it; in like manner water extracts from vegetables, not only the principles of which it is the natural diſſolvent, but with them a certain quantity of the reſinous and earthy matter, ſuſpended with them by an adheſion; but theſe ſurcharges do afterwards ſeparate themſelves from the extractive matter.

Among the ingredients employed in dying, there are ſome whoſe colour, or the part capable of giving the die, reſides in a reſinous or earthy ſubſtance, of the nature of thoſe which partly diſſolve in water, by the help of the extractive matter of the ſame ingredients; but afterwards of themſelves ſeparate from it. The decoction of ſuch ingredients is therefore *reſino-extractive*, and if ſtuffs be ſoaked or boiled in it, the coloured reſinous part fix upon the ſtuffs, die them, and adhere to them by ſimple contact, and water has not then any power to diſlodge them. To perform the buſineſs of dying with this kind of ingredients, no preparation is neceſſary, either as to the tinging ingredient, or the ſtuff that is to take the die.

The principal ſubſtances of this kind are green wall-nut ſhells, walnut root, ſumach, ſanders, and alder bark.

There are other dying ingredients whoſe colouring part is of ſo reſinous a nature, that water, even aſſiſted with their extractive matter, is incapable of diſſolving it; the chief of this kind are indigo, and carthamus, or baſtard ſaffron. For which cauſe their ingredients cannot die till the reſinous part of them is firſt diſſolved; and this is effected by the means of ſaline ſubſtances, eſpecially alkaline ſalts. Each of theſe ſubſtances requires a particular treatment, deſcribed at large in M. Macquer's book.

The colouring matter of almoſt all other ſubſtances uſed in dying is of the abſolute extractive nature. It is entirely diſſolvable in water; dyers weed, ſavory, and all herbs that tinge yellow; Indian wood, Braſil, fuſtick, yellow-wood, and all the dying woods; madder, kermes, cochineal, and many other ingredients, yield a die of this kind; ſuch drugs require no preparation, nor any particular diſſolvent; water alone is ſufficient. But ſhould you attempt to apply ſuch extractive colours to ſtuffs, that have not undergone a due preparation, you will ſoon find them to prove no other than a kind of dawbing without any ſolidity, which ſimple water can readily waſh away.

It was therefore indiſpenſably neceſſary to find out a means of impregnating ſtuffs to be died, with ſome biting ingredients capable of unnatura-

turalizing, in ſome degree, their extractive tincture, and particularly to diveſt it of its readineſs to be diſſolved in water. This has been happily effected, by penetrating the ſubſtances uſed in dying with ſeveral ſalts adapted to that end, of which alum is the principal. But it is to be noted that theſe extractive colours, though ſecured all by the ſame biting ingredients, are not all fixed with an equal degree of ſolidity. Some, as thoſe of diers-weed, madder, kermes, cochineal, are ſo well ſecured by the effect of biting ingredients, that they are capable of reſiſting the action of the air, and of laſting as long as the ſtuffs themſelves, without ſenſibly fading. Others, particularly Indian and Braſil wood, &c. can be but imperfectly fixed, they change, fade, and almoſt entirely vaniſh in more or leſs time; hence the diſtinction between *good* and *falſe die*. M. *Macquer* judges it practicable to fix the colours of falſe die; doubtleſs the greateſt and moſt uſeful problem of this kind that can be ſolved.

The German *powder for ſilvering ſmall plaſter buſts, ſtatues, or carved work, called* Argentum Moſaicum.

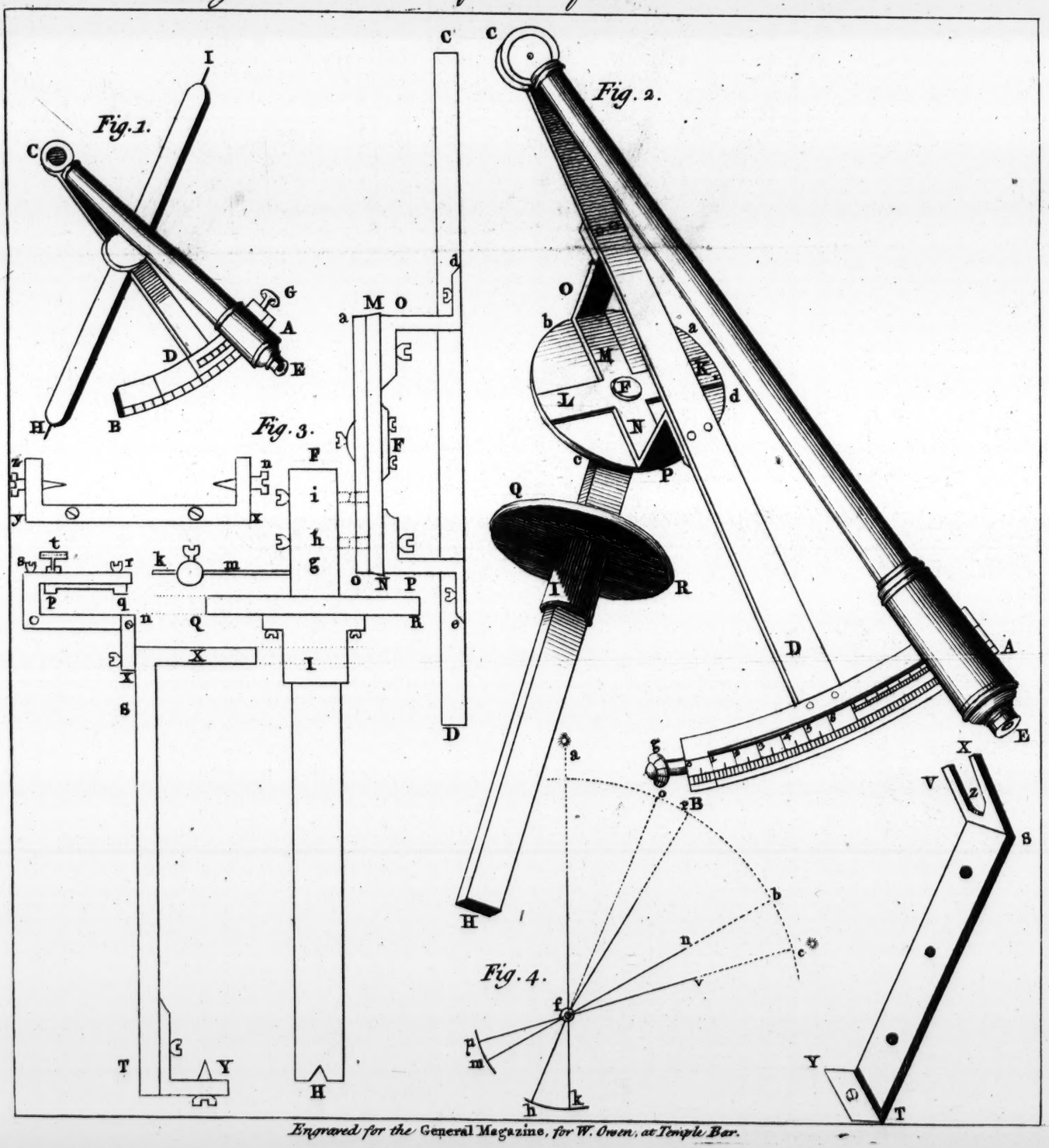
TAKE of very pure tin one pound. Put it into a crucible, and ſet it on the fire to melt: when it begins to run into fuſion, add to it an equal quantity of biſmuth or tin-glaſs, and ſtir the mixture with an iron rod, or ſtem of a tobacco-pipe, till the whole be entirely melted and incorporated. Take the crucible then from the fire; and, after the melted compoſition is become a little cooler, but while it is yet in a fluid ſtate, pour into it a pound of quickſilver, gradually; ſtirring it in the mean time, that the mercury may be thoroughly conjoined with the other ingredients. When the whole is thus commixed, pour the maſs out of the crucible on a flat marble ſtone; where, as it cools it will take the form of an amalgama or metalline paſte, which will be eaſily bruiſed into a flaky powder, and is then fit for uſe.

This powder may be either tempered, in the manner of ſhell gold, with gum water; or rubbed over a ground properly ſized according to the known methods for gold powders; and it will take a very elegant poliſh from a dog's tooth or burniſhers, and hold its colour much better with a ſlight coat of varniſh over it, than any true ſilver powder.

The ſizes for ſilvering ought not to be mixed, as is commonly done where gold is uſed, with yellow, or bole armoniac; but with ſome white ſubſtance, whoſe effect may prevent any ſmall failures in the covering the ground with the ſilver from being ſeen, in the ſame manner as the yellow ſubſtances do the gold. This may be done with flake-white, or white-lead when the ſizes formed of oil are uſed: but whiting is the proper matter in the burniſh for ſilvering, or where the glovers or parchment ſize is uſed. Tobacco-pipe clay, with the addition of a very ſmall quantity of lamp-black to give a ſilvery greyiſhneſs to the compoſition, is ſtill fitter for this purpoſe.

Deſcrip-

M.r Graham's Sector for Comparative Observations.



Engraved for the General Magazine, for W. Owen, at Temple Bar.

Deſcription and uſe of Mr. Graham's *ſector for comparative obſervations.*

IT is allowed that a micrometer is the moſt accurate and convenient inſtrument for obſerving the place of a planet or a comet, when it happens to be near enough to any known fixt ſtar wherewith its poſition may be compared; by taking the differences of its right aſcenſion and declination from thoſe of the ſtar. But this being frequently impracticable, by reaſon that many large ſpaces in the Heavens are void of ſtars whoſe places are known; it has been found neceſſary to have recourſe to moveable quadrants or ſextants, furniſhed with teleſcopic ſights, for taking larger diſtances; which neceſſarily requires two obſervers. But beſides the difficulty and expence of procuring good inſtruments of this ſort, the great trouble and uncertainties in obſerving with them are very notorious, ariſing chiefly from the difficulty the obſervers find in making their obſervations at each teleſcope, correſpond together at the ſame inſtant, while the inſtrument is following the diurnal motion of the Heavens. The lovers of aſtronomy are therefore much obliged to Mr. *Graham* for contriving a very curious and accurate inſtrument for the purpoſe aforeſaid; that is, for taking ſuch differences of right aſcenſion and declination as are too large to be obſerved through a fixed teleſcope; and yet with equal facility, and exactneſs too in proportion to the radius of the inſtrument. We will firſt give an idea of it, and then deſcribe the particulars of the mechaniſm.

Let A B (fig. 1.) repreſent an arch of a circle containing ten or twelve degrees, having a long plate C D for its radius, fixed to the middle of the arch at D. Let this radius be applied to the ſide of an axis H F I, and be moveable about a joint fixt to it at F, ſo that the plane of the ſector will always be parallel to the axis H I; which being placed parallel to the axis of the earth, the plane of the ſector will always be parallel to the plane of ſome horary circle. Let a teleſcope C E be moveable about the center C of the arch A B, from one end of it to the other, by turning a ſkrew at G; and let the line of ſight be parallel to the plane of the ſector. Now by turning the whole inſtrument about the axis H I, till the plane of it be ſucceſſively directed, firſt to one of the ſtars and then to the other, it is eaſy to move the ſector about the joint F into ſuch a poſition, that the arch A B when fixt, ſhall take in both the ſtars in their paſſage by the plane of it; provided that the difference of their declinations does not exceed the arch A B. Then having fixt the plane of the ſector a little to the weſtward of both ſtars, move the teleſcope C E by the ſkrew G, and obſerve, by a clock, the time of each tranſit over the croſs wires, and alſo the degrees and minutes upon the arch A B cut by the index at each tranſit: then is the difference of the arches the difference of the declinations, and by the difference of the times we have the difference of the right aſcenſions of the ſtars.

The mechaniſm of the principal parts of the inſtrument is this. Upon the ſide of an iron axis H I F (fig. 2.) wrought ſquare, and near the

top of it, there is fixt a broad circular plate *a b c* of ſolid braſs; upon which there lies a braſs croſs K L M N, which turns upon a joint at the center F. At the ends of the croſs plate M N are erected two equal perpendicular arms O and P, whoſe extremities are fixed by the ſkrews *d*, *e* to the backſide of the radius C D; which is ſtrengthened by a long braſs rib on its backſide, placed edge-ways from one end to the other, as repreſented in fig. 3. The arms O and P are no longer than is neceſſary for the ſector A B C to turn about the joint F quite clear of another circular plate Q R, which is fixt to the upper baſis of a braſs cylinder I, the iron axis H F being put through a ſquare hole in the middle of them both, and immoveably fixt in it. S T repreſents a long ſubſtantial plate of braſs, having two ſhort plates V X and Y T fixt perpendicular to the ends of it. Let us ſuppoſe the length of the plate S T to be parallel to the earth's axis, and to be firmly fixt in this poſition upon a pedeſtal, or otherwiſe, with its flat ſides facing the north and ſouth. Remove the axis H I and place the conical hole made in the end H upon the conical point of a ſkrew-pin at Y; and the cylinder I into the ſlit V Z X; whoſe parallel ſides V X embrace it, while it reſts againſt two points of an angular notch in the bottom of the ſlit at Z. By this means the whole inſtrument will always turn true about one and the ſame imaginary line. When the ſector is turned about the joint F (figs. 2 and 3.) till the radius C D becomes parallel to the axis H I, fig. 3. repreſents a ſection of the whole inſtrument, made by a plane paſſing at right angles through the radius C D, and through the rib on the backſide of it, and through the axis H I, and through the ſupporter S T. The ſeveral parts of the inſtrument are here denoted by the ſame letters in both figures. The arms O and P have two ſlits through the middle of their ends to receive the edge of the rib C D. The circular plate *a c* is fixt to the axis by the ſkrews *h*, *i*. The braſs rod *g k* is ſkrewed into the axis H I, and carries a braſs ball *l m* that ſlides along it, and is fixt by a ſkrew *m* at a proper place for ballancing the weight of the ſector and teleſcope placed on the oppoſite ſide of the axis. At the top of the ſupporter S T there is a hold-faſt *n o p q r s t v*, whoſe cavity *n o p q* receives the circular plate Q R. The end *q* of a ſpring-plate *p q* is fixt by a ſkrew *r* to the inſide of the upper plate Q, by twiſting the knob of a ſkrew *t* which works in a ſocket *v*. And to prevent this preſſure from diſlocating the plane of the circle Q R, and conſequently the poſition of the axis H I, the hold-faſt *n o p q* has liberty of yielding or turning upon the ends of two ſkrew-pins, that go into two conical holes in the oppoſite edges of the under plate *n o*; one of theſe ſkrews is ſeen at *n*, and the fixt piece that they ſkrew into is repreſented ſeparately at *n x y z*; *n*, *z* being the points that the hold-faſt turns upon. By this means the ſame ſkrew at *t* cauſes the upper and under plates of the hold-faſt *n o p q* to compreſs the the circle Q with equal forces. To the arm O there is faſtened ſuch another hold-faſt, which ſo compreſſes the circle *a c* and the croſs plate M N, as to ſtay the ſector and teleſcope in any given poſition,

ſition, from turning about the point F. This point is nothing but a cylindrical pin paſſing through the plates M N, *a c*. The flat head of the pin is fixt by three ſmall ſkrews to the plate M N; and to the oppoſite end of this pin a circular ſpring-plate is fixt by a ſkrew, that ſkews into the end of the pin. And the joint C at the center of the ſector A B C is made in the ſame manner.

The inſtrument may be from two to five or ſix feet radius, the length of the teleſcope, or radius of that which Mr. *Graham* made, which is now at the Royal Obſervatory, is two feet and a half; the breadth of the radius near the end C is one inch and a half; and at the end D two inches. The breadth of the limb A B is one inch and a half, and its length ſix inches, containing ten degrees, divided into quarters, and numbered from either end to the other. The teleſcope carries a *Nonius*, or ſubdividing arch, whoſe length being 16 quarters of a degree, is divided into 15 equal parts; which, in effect divides the limb into minutes, and, by eſtimation, into ſmaller parts. The length of the ſquare axis H I F is 18 inches, and of the part H I 12 inches; its thickneſs about a quarter of an inch. The thickneſs of the plates, and the other meaſures may be taken at the diſcretion of the workman.

The inſtrument may be rectified for taking obſervations, in the following manner. The interſection of the croſs wires muſt be placed at the ſame diſtance from the plane of the ſector as the centre of the object glaſs; and the plane deſcribed by the axis of the teleſcope or line of collimation, by the motion of the teleſcope on the limb, will be ſufficiently true; which may be examined by ſuſpending a long plumb-line at a convenient diſtance from the inſtrument, and by fixing the plane of the ſector in a vertical poſition, and then obſerving, while the teleſcope is moved by the ſkrew along the limb, whether the croſſing of the wires appears to move along the plumb-line.

The iron axis may be elevated nearly parallel to the axis of the earth, by means of a ſmall common quadrant; and its error may be corrected by making the line of collimation follow the circular motion of any of the circum-polar ſtars, while the whole inſtrument is moved about its axis, the teleſcope being fixed to the limb. For this purpoſe let the teleſcope be directed to the ſtar *a* (fig. 4.) when it paſſes over the higheſt part of its diurnal circle, and let the diviſion cut by the Nonius upon the limb be then noted. Again, after 12 hours, when the ſtar comes to the loweſt point of its circle, having turned the inſtrument half round its axis, to bring the teleſcope into the poſition *m n*; if the croſſing of the wires covers the ſame ſtar, the elevation of the axis is exactly right: but if it be neceſſary to move the teleſcope into the poſition $\mu\ \nu$ in order to point to this ſtar at *c*, the arch $m\ \mu$ which meaſures the angle $m f \mu$ or *b f c*, will be known; and then the axis muſt be depreſſed half the quantity of this given angle, if the ſtar paſſed below *b*; or muſt be raiſed ſo much higher if above it. By making the like obſervations on the ſame ſtar on each ſide the pole, in the ſix o'clock hour circle, the error of

the axis, towards the eaſt or weſt, may alſo be found and corrected, till the croſs wires follow the ſtar quite round the pole. For ſuppoſing *a o p b c* to be an arch of the meridian (or in the ſecond practice, of the ſix o'clock hour-circle), make the angle *a f p* equal to half the angle *a f c*; and the line of collimation will point to the pole, and the angle *o f p*, which is the error of the axis, will be equal to half the angle *b f c* or *m f μ*, found by the obſervation; becauſe the difference of the two angles *a f b*, *a f c* is double the difference of their halves *a f o* and *a f p*. Unleſs the ſtar be very near the pole allowance muſt be made for refractions by a proper table.

On the diſſolution of ſulphur in ſpirit of wine, by the Comte de Lauraguais; *from the memoirs of the Royal Academy of Sciences for* 1758, *juſt publiſhed.*

IT ſometimes ſo happens, that ſome curious facts remain utterly unknow in chemiſtry, whilſt we adopt an opinion diametrically contrary to them; and this through neglecting ſome delicate point in the operation, which would have pointed out the reaſon why our experiments proved defective.

Sulphur, for example, has hitherto been looked upon as undiſſolvable in ſpirit of wine, and it has been taken for granted, perhaps, that the nature of the one and the other having been thoroughly examined, gave riſe to this doctrine. M. le Comte *de Lauraguais*, to whom the public is greatly obliged for ſeveral intereſting inquiries in chemiſtry, was doubtful if ſuch an opinion was eſtabliſhed upon clear facts, and therefore reſolved to put it to the teſt of experiments. The firſt which he tried, ſeemed to confirm the common notion: however, inſtead of giving into it haſtily, he made other experiments, which he conducted by a very ingenious proceſs, and then found that the ſulphur was diſſolved in the ſpirit of wine, to the deſtruction of the ancient opinion. The manner of his operations was very ſimple, and will be eaſily underſtood.

He began with boiling about a pound of ſpirit of wine in a pelican, with two ounces of the flowers of ſulphur twice ſublimated. From this mixture no combination enſued, although it had been kept almoſt four hours on the fire; the ſpirit of wine, more agile than the ſulphur, was diſtilled by itſelf; and, indeed, it was impoſſible the two bodies thus circumſtanced, ſhould be united. The eſſential point was to procure between them one common and contemporaneous evaporation.

M. le Comte *de Lauraguais* effected his purpoſe by making uſe of an apparatus of which M. *Rouelle* is the inventor; he put ſeparately into two ſmall retorts, flowers of ſulphur and ſpirit of wine; he fitted their beaks to a common receiver, and gave to each a degree of fire ſufficient to produce the evaporation; thus the two ſubſtances were united in the ſtate of vapours and formed an amber-coloured liquor. He precipitated part of this liquor by pouring water into it, upon which the mixture

grew

grew turbid, the water mixed with ſpirit of wine, which the ſulphur quitted and formed a falſe precipitate at the bottom of the veſſel.

He ſoon brought this operation to perfection by uſing a large cucurbit in a ſand heat: firſt he put flowers of ſulphur into the cucurbit, and on thoſe flowers he placed a glaſs cup, which contained ſpirit of wine. Sulphur riſes more ſluggiſhly in vapours than ſpirit of wine, but being, in this caſe, in contact with the fire, it received a degree of heat ſuperior to that which acted upon the glaſs; and ſo the evaporation of the two ſubſtances was compleated at the ſame time; whence reſulted a union of a great part of their *moleculæ*.

Rectified ſpirit of wine, in this experiment, is impregnated with a leſſer quantity of ſulphur than the common ſpirit of wine; but the combination always takes place, provided the proceſs now deſcribed be made uſe of.

Repeated cohobations do not produce a union of a greater quantity of ſulphur with the ſpirit of wine, than what reſults from a ſingle operation: this quantity of diſſolved ſulphur, according to M. le Comte de Lauraguais's experiments, is a little more than ſix grains on an ounce and ſix drams of the liquor, that is, the ſulphur thus combined is about a hundreth part of the mixture.

The Life of the Abbé DE LA CAILLE.

NICOLAS-LOUIS DE LA CAILLE was born at a little town called *Rumigny*, in the dioceſe of *Rheims*, the firſt of March in the year 1713. His father was *Louis de la Caille*, his mother *Barbara Ruby*; both happier in qualities of mind than affluence of fortune. The father had ſerved in the army, which he quitted, and in his retirement ſtudied mathematics, and amuſed himſelf with mechanic exerciſes, wherein he proved the happy author of ſeveral inventions, of conſiderable uſe to the public.

Nicolas, almoſt in his infancy, took a fancy to mechanics, which proved of ſignal ſervice to him in his maturer years. He was ſent young to ſchool at *Mantes-ſur-Seine*, where he diſcovered ſo early tokens of genius, as gave his parents ſanguine hopes of his future improvements.

In 1729, he went to *Paris*, and ſtudied at the college *de Liſieux*, firſt the claſſics, and then philoſophy, and mathematics, under M. Robert. In a few years his father died, and with him all family expectations: however, he happily met with a patron in the duke of *Bourbon*, who heard of his merit, and had been beneficent to his father.

After he had finiſhed his courſe of philoſophy, he went to ſtudy divinity at the College *de Navarre*, purpoſing to embrace an eccleſiaſtical life. Here he redoubled his ſtudies, employing many hours of the day in reading books of religion, and as many of the night in mathematical exerciſes,

exercises, or in contemplating the stars. This was his constant tenor of life for three years.

At length he was ordained a deacon, and officiated in the church of the college *de Mazarin* several years; but he never entered into priests orders, apprehending that his astronomical studies, to which he became most assiduously devoted, might too much interfere with his religious duties. His reputation in the celestial science soon procured him access to the late *James Cassini*,* the king's first astronomer, and to the present M. *Maraldi*, who both had apartments, and all manner of instruments and accommodations in the Royal Observatory. With these he contracted a most intimate familiarity and friendship; and in the year 1738 he assisted the latter in a survey of the sea-coast from *Bayonne* to *Nantes*.

In 1739, he was conjoined with M. *de Thury*, the son of the before mentioned M. *Cassini*, in verifying the meridian of the Royal Observatory, thro' the whole extent of the kingdom of *France*. In the month of November, of the same year, whilst he was engaged day and night in the necessary operations, at a great distance from *Paris*, and without soliciting or knowing any thing of the matter, he was elected into the vacant mathematical chair which the celebrated M. *Varignon* had so worthily filled. Here he began to teach about the end of 1740, after his return from his laborious expedition, and caused his lectures in due time to be printed at his own expence.

The hours that could be spared from the duties of his professorship, he employed in carefully computing the results of the many mensurations and observations celestial and terrestrial, relative to the business of the meridian. In the mean time, an observatory was ordered to be erected for his use in the college, and furnished with a suitable apparatus of the best instruments.

In May, 1741, M. *de la Caille* was admitted into the Royal Academy of Sciences, as an *adjoint member*, for astronomy. Besides the many excellent papers of his dispersed up and down in their memoires, he published elements of geometry, mechanics, optics, and astronomy. Moreover, he carefully computed all the eclipses of the sun and moon that had happened since the Christian æra, which were printed in a book, published by two Benedictines, entituled *L'Art de verifier les dates, &c. Paris*, 1750, in 4to.

Besides these, he compiled a volume of astronomical *Ephemeridies* for the years 1745 to 1755; another for the years 1755 to 1765; and a third for the years 1765 to 1775; an excellent work, entituled *Astronomiæ fundamenta novissimis solis et stellarum observationibus stabilita*, and the most correct Solar Tables that ever appeared.

Having gone through a seven years series of astronomical observations in his own observatory, he formed a project of going to observe the southern stars at the *Cape of Good Hope*. This was highly approved of

* See his life, page 27.

of by the academy, and the prime miniſter Comte *D'Argenſon*, and very readily agreed to by the ſtates of *Holland*.

Upon this he drew up a plan of the method he propoſed to purſue in his ſouthern obſervations, ſetting forth that beſides ſettling the places of the fixt ſtars, he propoſed to determine the parallax of the Moon, Mars, and Venus. But whereas this required correſpondent obſervations to be made in the northern parts of the world, he ſent to thoſe of his correſpondents who were expert in practical aſtronomy,* previous notice in print, what obſervations he deſigned to make at ſuch and ſuch times, for the ſaid purpoſe.

Then without farther loſs of time he packed up his inſtruments and made preparations for his voyage; which Comte *d'Argenſon* being informed of, ſent him 4000 livres, though he had never ſolicited any ſuch favour, and with it a written promiſe of whatever further ſum he might have occaſion for; this however was but a ſmall addition to his purſe, for he expended in the purchaſe of new and larger inſtruments much more than he was before poſſeſſed of.

At length, on the twenty-firſt of October, 1750, he ſet out from *Paris* for the *Cape*, accompanied only by a young artificer, who, from the great affection he bore him, earneſtly requeſted that he might be the companion of his voyage. He ſailed from *Port l'Orient* the twenty-firſt of November on board the *Glorieux*, and had the happineſs to find the captain† a very civil man, and a good mathematician, which was no ſmall ſatisfaction to him; and he proved an excelent help-mate in obſerving the latitudes, longitude, &c. during the whole voyage. They arrived at the *Cape* the 19th of April, 1751.

Having waited on the governor M. *Tulbagh*, who received him with great civility, and during his ſtay there conferred inceſſant favours upon him, he forthwith got his inſtruments on ſhore, and with the aſſiſtance of ſome *Dutch* artificers ſet about building an aſtronomical obſervatory, in which his apparatus of inſtruments was properly diſpoſed as ſoon as it was in fit condition to receive them.

The ſky at the *Cape* is for the moſt part pure and ſerene. But when a ſouth-eaſt wind blows, as it frequently does, it produces ſome terrible and likewiſe ſtrange effects. The ſtars look bigger and ſeem to caper; the moon has an undulating tremor, and the planets have a ſort of beards, like comets.

Two

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* Theſe, beſides his aſtronomical brethren of the Royal Academy of Sciences, were Dr. *Bradley* at *Greenwich*, Dr. *Bevis*, at *London*, Mrs. *Muller* and *Griſchow* at *Peterſburg*, M. *Struyk* at *Amſterdam*, M. *Wargentin* at *Stockolm*, M. *Ferner* at *Upſal*, M. *Mayer* at *Gottingen*. Likewiſe ſeveral Jeſuit aſtronomers: F. *Boſcowich* at *Rome*, Fs. *Hell* and *Scheffer* at *Vienna*, F. *Ximenes* at *Florence*, F. *Pezenas* at *Marſeilles*, Fs. *Gaubil* and *Benoiſt* at *Pekin*.

† M. *D'Après de Mainvillette*, author of an excellent work entitled *Le Neptune Oriental*.

Two hundred and twenty eight nights did our aſtronomer ſurvey the ſouthern Heavens, during which ſpace, which is almoſt incredible, he obſerved more than ten thouſand ſtars: and whereas the ancients filled the heavens with monſters and old wives tales, the Abbè *de la Caille* choſe rather to adorn them with the inſtruments and machines which the modern philoſophy has made uſe of in the conqueſt of nature. See the planiſphere in his *Cœlum Auſtrale Stelliferum*.

With no leſs ſucceſs did he attend to the parallax of the Moon, Mars, Venus, and the Sun.

Having thus executed the purpoſe of his voyage, and no preſent opportunity offering for his return, he thought of employing the vacant time in another arduous attempt: no leſs than to undertake the meaſure of the earth, as he had already done that of the heavens. This indeed had, through the munificence of the *French* king, been done before by different ſets of learned men, both in *Europe* and *America*; ſome determining the quantity of a degree under the equator, and others, under the arctic circle: but it had not as yet been decided whether in the ſouthern parallels of latitude the ſame dimenſions obtained, as in the northern. This point one ſingle man reſolved to examine into, accompanied only with his friend Mr. *Beſtbier*, (at whoſe houſe he lodged) as a guide and interpreter, the young artificer before mentioned, and a few *Hottentot* ſervants.

His labours were rewarded with the ſatisfaction he wiſhed for, having determined a diſtance of 419814 feet from a place called *Klip-Fonteyn* to the *Cape*, by means of a baſe of 38802 feet three times actually meaſured: whence he diſcovered a new ſecret of nature, namely, that the radij of the parallels in ſouth latitude are not the ſame as thoſe of the correſponding parallels in north latitude. About the thirty third degree of ſouth latitude he found a degree on the meridian to contain 342222 *Paris* feet.

The next *French* ſhip which arrived at the *Cape* brought M. *De la Caille*, inſtructions not to return home, but to proceed to the Iſles of *France* and *Bourbon*, in order to determine the poſition of them, which had indeed been done the laſt year by the above mentioned M. *de Après de Mainvillette*; however he choſe to obey the royal mandate, and went.

He returned to *Paris* the 27th of September 1754, having in his almoſt four years of abſence expended no more than 9144 livres on himſelf and his companion: a ſingular inſtance of honeſt frugality in ſo profuſe and luxurious an age! Nor ſhould it paſs unmentioned, that at his coming into port he refuſed a bribe of 100,000 livres, offered by one who thirſted leſs after glory than gain, to be a ſharer in his immunity for the cuſtom-duties.

After receiving the congratulatory viſits of his more intimate friends, and the aſtronomers; he firſt of all thought fit to draw up a reply to ſome ſtrictures which profeſſor *Euler* had publiſhed relative to the meridian,

dian, and then he ſettled the reſults of the compariſon of his own with the obſervations of other aſtronomers, for the parallaxes. That of the ſun he fixed at 9″ ½, of the moon at 56′ 56″, of Mars in his oppoſition 36″, of Venus 38″. He alſo ſettled the laws whereby aſtronomical refractions are varied by the different denſity or rarity of the air, by heat or cold, and drought or moiſture. And laſtly, he ſhewed an eaſy way of finding the longitude at ſea, and practicable by common navigators, by means of the moon, which he illuſtrated by examples ſelected from his own obſervations during his voyages.

His fame being now eſtabliſhed upon ſo firm a baſis, the moſt celebrated academies of *Europe* claimed him as their own, and he was elected unanimouſly a member of the Royal Society of *London*, of the inſtitute of *Bologna*, of the imperial Academy of *Peterſburg*, and of the Royal Academies of *Berlin*, *Stockholm* and *Gottingen*.

In the year 1760 M. *de la Caille* was attacked with a ſevere fit of the gout, which however did not interrupt the courſe of his ſtudies, for he then planned out a new and immenſe work, no leſs than a hiſtory of aſtronomy through all ages, with a compariſon of the ancient and modern obſervations, and the conſtruction and uſe of the inſtruments employed in making them. In order to purſue the taſk he had impoſed upon himſelf in a ſuitable retirement, he obtained a grant of apartments in the royal palace of *Vincennes*; and whilſt his aſtronomical apparatus was erecting there, he began printing his catalogue of the ſouthern ſtars,* and the third volume of his Ephemerides.†

The ſtate of his health, formerly confirmed by his labours, was towards the end of the winter of 1763 greatly reduced. His blood grew inflamed, he had pains of the head, obſtructions of the kidnies, loſs of appetite, with an oppletion of the whole habit. His mind remained unaffected, and he reſolutely perſiſted in his ſtudies as uſual. In the month of *March* medicines were adminiſtred to him, which rather aggravated than alleviated his ſymptoms: and he was now ſenſible that the ſame diſorder which in *Africa* ten years before yielded to a few ſimple remedies, did in his native country bid defiance to the beſt phyſicians; this induced him to ſettle his affairs: his manuſcripts he committed to the care and diſcretion of his eſteemed friend M. *Miraldi*. It was at laſt determined that a vein ſhould be opened, but this brought on an obſtinate lethargy, in which he died the twenty-third day of *March*, being then forty-nine years old.

* *M. Maraldi* finiſhed the edition, and gave it the title of *Cœlum Auſtrale Stelliferum*.

† This laſt volume was printed off before the author's death, but not publiſhed. M. *Bailly*, made an addition to it, with this title: *Catalogue de* 515 *Etoiles Zodiacales, obſerveés en* 1760 *et* 1761 *par M. l'Abbé* DE LA CAILLE, *et reduites au commencement de l'année* 1765, *par M.* BAILLY, *de l'Academie des Sciences*.

He was naturally of a robuſt habit, with a very comely open countenance, ſignificant of the complection of his mind; humane, friendly, modeſt to an extreme.

Obſervations on the cauſe of ſmut in wheat, with a practical cure.

THE ſmut in wheat is an evil which has long been complained of, and many methods tried to prevent it, all of which have proved ineffectual, or, at beſt, but a mitigation of the diſeaſe; which methods I need not here enumerate, as they are generally known, or are to be met with in various authors who have wrote on agriculture: ſome of them being calculated to forward vegetation, and ſtrengthen the plant, ſuch it will be adviſeable to continue in the practice of.

But amongſt all the authors who have wrote on this ſubject, I do not remember to have ſeen one who has pointed out a probable conjecture with reſpect to the cauſe of this malady, ſo as to be ſupported by any tolerable degree of reaſon. And inaſmuch as natural hiſtory has been, and is my favourite ſtudy, (of which I take agriculture and a knowledge of cattle to be no ſmall part) I have frequently employed ſome leiſure hours, to endeavour to aſſign cauſes for various diſeaſes, to which the productions of the earth are ſubject; among which, this of ſmut in wheat is one. And being deſirous to improve my knowledge, I am willing to communicate, that if any thing worth notice might come from me, I may have the pleaſure of doing ſomething for the public good, and thereby induce others to make their diſcoveries known, from which good, myſelf, as well as many more, may reap ſome advantage.

I remember to have read a little treatiſe, wrote ſome years ſince, by James Logan, (chief juſtice and preſident of the council, of the province of Penſylvania) on the generation of plants, containing obſervations made on the maize, by which he diſcovered that plant to be (what Linnæus calls *Monoecia*, or) a plant bearing male and female flowers, and, as ſuch, capable of being impregnated with a fructifying duſt from another plant of the like kind.

I own, the reading this pamphlet firſt gave me the hint of the generation of vegetables, from which I continued my obſervations reſpecting other plants, and among the reſt to wheat, and the like; though this is not of the ſame claſs with maize, but of the claſs *triandria* of Linnæus, and is hermaphrodite, yet, nevertheleſs, equally ſubject to be impregnated by duſt from another plant, as well as with duſt from itſelf.

Having frequently obſerved amongſt wheat, while green, (though ſhot up into ſpindle) ſeveral black, blighted ears, I examined them, and found theſe were ears in which, by ſome accident, the intention of nature was prevented; I ſuppoſe, by being detained too long in the hoſe, and by the natural humidity of the plant, a fermentation promoted in its ear, deſtroying the ſmall veſſels through which the corns were to receive nouriſhment; by which means their contents became black, dry,

dry, and duſty: theſe ears, growing up with the others, imbibe moiſture ſufficient to cauſe the duſty particles in the grains in them to expand, and burſt the fine ſkin which contained them: being thus ſet at liberty, the air, if it happens to be a dry ſeaſon, dries them again; by which means they become light enough to float therein, when ſeparated from the ſkin which held them. If this happens when the wheat is in bloſſom, which it often does, part of this duſt enters the ſtygma of healthy corns, and thereby infects them: the pulp in thoſe becoming black, a fermentation is raiſed therein, which deſtroys the life of the grain thus impregnated: hence the diſagreeable ſmell is acquired peculiar to this diſeaſe (the ſmell in a grain of ſmut being the ſame as in a black blighted ear.)

From hence it is eaſily accounted for, why, often, a few grains in the ear are ſmutty, and the others good.

Some may perhaps object, if this be the caſe, why are not barley and oats ſubject to the like diſeaſe, ſince both theſe are ſubject to the black blight as well as wheat? Such objectors would do well to obſerve, that theſe have a more tough ſkin than wheat, which does not burſt till after the blowing of theſe ſorts of corn is over; therefore when it does burſt, the duſt can do no harm.

Having thus pointed out the cauſe, I now proceed to preſcribe the remedy, which is, when the corn is ſhot into ſpindle, and the ears begin to appear, let ſome perſons go along each furrow in the field, and carefully break off all ears of the black kind, (not pull them up, becauſe often from the ſame root grow ſeveral others, which are good and ſound ears) and when broke off put them into a bag, and carry them away; for ſhould they be thrown on the ground, there may ſtill be danger of infection from them; and as 'tis poſſible there may be ſome of theſe diſeaſed ears which are not burſten, and therefore may eſcape being gathered, theſe may be known by the ſtalk at the neck being crooked, and bent in the length of three or four inches backward, and forward five or ſix bends, and the hoſe nearer to the head of ſuch than the ears which are good.

The ſeaſons in which wheat is moſt liable to be ſmutty are, it is well known, ſuch in which it happens to be dry weather and windy at the time of blowing; but if it happens to be wet during that time, it is very rare to ſee a ſmutty ear in a field.

Methods of planting willow trunchions, ſaving lucern ſeed, and planting magazan beans for horſe-food.

THE ingenious recommender ſays, I ſet twenty willow-ſets (the ſwallow tail'd willow, or white willow) trunchions, ſix or eight feet long; ſloping ſharp at the bottom, quite round, with the bark off above a hand's breadth; I ſet them in round holes, digging out with the ſpade two feet deep, and then a deep hole with an iron crow, and chopped and

rammed the turf in firſt, and then rammed the looſe mould upon that, as you would ſet a gate-poſt: they were firſt ſoaked three weeks in water.

I ſet twenty on a ſandy bank, on the turf part, in holes a foot ſquare.

I ſet twenty, in the ſame manner, on level turf ground; and twenty alſo in looſe land, that was always dug; all in the month of February.

Thoſe on the looſe ground all grew; as alſo thoſe on the bank; (there was no water in the ditch, for it was a perfect red ſand, and no clay at bottom) thoſe on level ground all died.

You ſee, then, the advantage of ſetting willows on banks, near the ſea, or any where; or in looſe earth.

I ſend you, alſo, the beſt way of ſaving the ſeed of lucern.

Plant out three or four ſets, two or three years old, in the wet months, in the richeſt ground you have, to the ſouth ſun: when they run up high, ſtick a pole in the middle, and ſmall faggot-ſticks all round, and tie a band, or whipcord, round them, but not too tight.

Your plants will run up ſix feet, (I have tried it) and bloſſom well, and bear good ſeed.

Dry it well in bags, and rub it out by degrees; 'tis the beſt of ſeed.

I clip the ſeed off, as it ripens, with a pair of ſciſſars: I ſowed it laſt October, and ſhall plant it out in ſummer, if the froſt don't kill it: I plant them out at a foot diſtance, in rows, round my garden, for borders, in the richeſt ground; and in ſummer, when in bloſſom, they are near ſix feet high.

I ſow the magazan bean at Chriſtmas; they are a very ſweet bean, leſs than the hotſpur: they are very good for horſes, if cut while ſoft, with chaff-hay, in a box, and ſhook about in the barn, they will get dry and hard, will be excellent food, and make them perform double their work.

I plant them quite thick, and deep, in a drill, and cover them with litter in froſts; and plant them out in ſpring, in rows, near two feet diſtance, and four inches in the rows.

A remedy for the White Scour in Sheep.

TAKE a pint of old verjuice; then take half a pound of common ſalt, or bay-ſalt is rather better; dry it before the fire, bruiſe it in a ſtone mortar, and ſift it through a fine ſieve; when this is done, mix it by degrees into the verjuice, to which add half a pint of common gin, and bottle it up for uſe. When any of your ſheep are ſeized with this diſorder, ſeparate them from the flock, and give each of them the value of three large table ſpoonfuls of the mixture for a doſe, repeating it in two days afterwards, if they are not better. It is a great chance but this ſimple remedy cures them. I have often tried it with ſucceſs; but you muſt mind to put them into a dry paſture, or all will be vain.

Now I am upon the ſubject of ſheep, I muſt let you into another ſecret, which is to kill ticks, or ſheep-lice, that are ſo troubleſome to this

this animal. Some ſheep have been known to pull off almoſt all their wool when they have been tormented with this troubleſome inſect, and even, if they do not come to this height, the animal never thrives whilſt it is infeſted by them.

For a cure, take half a gallon of ſoft water, diſſolve in it a quarter of an ounce of ſublimate, an ounce of cream of tartar, and a quarter of a pound of bay-ſalt, the two laſt being firſt pounded and ſifted. When your ſheep are troubled with ticks, let your ſhepherd part their wool, and moiſten their ſkins here and there with this compound, which is reckoned, by many who have tried it, to be infallible when twice or thrice applied, and once often does.

Another very good way to preſerve them from this peſt, or cure them if the diſorder is but incipient, is to waſh them, after ſhearing, with ſome ſea-water, or ſtrong brine if you do not live near the ſea.

This waſhing is good for them in many other reſpects, preſerving them from various diſorders to which they are ſubject.

The manner of making Sal Armoniac *in Egypt.*

SAL Armoniac is made of dung, of which camels is eſteemed the ſtrongeſt and beſt. The little boys and girls run about the ſtreets of Kairo, with buckets in their hands, picking up the dung, which they carry and ſell to the keepers of the bagnios; or, if they keep it for their own burning, they afterwards ſell the ſoot at the place where the ſal armoniac is made. Alſo the villages round about Kairo, where they burn little elſe than dung, bring in their quota; but the beſt is gathered from the bagnios, where it cruſts upon the wall about half a finger's breadth. They mix it all together, and put it into large globular glaſſes, about the ſize of a peck, having a ſmall vent like the neck of a bottle, but ſhorter. Theſe glaſſes are thin as a wafer, but are ſtrengthened by a treble coat of dirt, the mouths of them being luted with a piece of wet cotton. They are placed over the furnace in a thick bed of aſhes, nothing but the neck appearing, and kept there two days and a night with a continual ſtrong fire. The ſteam ſwells up the cotton, and forms a paſte at the vent-hole, hindering thereby the ſalts from evaporating, which, being confined, ſticks to the top of the bottle, and are, upon breaking it, taken out in thoſe large cakes, which they ſend to England.

The natural ſal armoniac, uſed by the ancients, was found in the lands of Lybia, near the temple of Jupiter Ammon. It was ſuppoſed to be generated in thoſe ſands from the urine of camels. The artificial or common ſal armoniac is chiefly brought from Egypt; and though there is hardly a more common drug, it is but very lately we have known in what manner it is made, being procured by ſublimation from all ſorts of urine of men and beaſts, mixed with common ſalt and ſoot. It muſt be choſen white, clear, tranſparent, dry, and without filth; and when broken it muſt appear as if full of needles.

The uſe of this ſalt is very conſiderable in medicine, and ſeveral artificers uſe it, ſuch as dyers, ſilverſmiths, pin-makers, farriers, &c. Its ſpirit is ſo ſharp, that, when mixed with aqua-fortis, or ſpirit of nitre,

it

it completes the diſſolution of gold, which theſe two powerful diſſolvents could not do without it.

Publiſhed by order of the Society for the encouragment of arts and ſciences.

Proceſs for making Sal Mirabile. *By Mr. Fergus, in Piccadilly.*

TAKE calcined kelp, any quantity, powder it in an iron mortar, put it into an earthen pan well glazed, and pour upon it boiling water, in the proportion of a quart to a pound: ſtir it about for a little time, and either filtrate or decant the clear liquor from the ſediment: put the clear liquor in a glazed earthen diſh, place it over a gentle fire, and when hot pour in gradually oil of vitriol diluted (viz. to every pound of oil of vitriol a pint and a half of water) till no efferveſcence ariſes, and you have gained the exact point of ſaturation: then filtrate through paper, or let it ſtand to depurate, and decant the clear liquor; evaporate to a pellicle, and ſet it by to cryſtallize.

By the above proceſs I obtained from a pound and a half of kelp, eight ounces and a half of Sal Mirabile; and found, that ſomething leſs than two ounces of ol-vitrioli was ſufficient for the ſaturation.

N. B Sal Mirabile may be alſo made from barilla inſtead of kelp; but not ſo cheap.

Dr. Stephen Hale's method to preſerve the health of ſoldiers and ſailors in hot climates.

BOTH true policy and humanity call on the friends of their country to contribute to the preſervation of lives which are of conſequence to its happineſs. The three following ſhort rules were communicated by that moſt benevolent of men, the late Dr. Stephen Hales. It is to be hoped that a proper regard will be paid to them by the regiments now preparing to embark for the Weſt-Indies, where their lives may be in more danger from the intemperate heat of the climate, than from any other enemy.

Firſt, let all our ſoldiers who have a mind to preſerve health, live temperately; particularly let them abſtain from all exceſs in rum, or other ſpiritous liquors. Whatever they drink of ſpirits muſt be a long time diſtilled, and reduced to an innocent ſherbet, by mixing in it five parts in ſix of water. This may be done by the care of their officers.

Secondly, let them, as much as poſſible, avoid the heavy evening dews, or wetting their feet at night, which laſt generally produces fatal ſore throats; if, by accident, they wet their feet, the ſureſt remedy is, as quickly as they can after, to wet their whole body.

Thirdly, let them, where they have opportunity, plunge every morning into the ſalt water. In the inland parts, where this opportunity is not at hand, let each ſoldier every morning throw into his baſon an ounce of ſalt; and after it is diſſolved in the water, dip into the baſon a coarſe towel, and wet his head, his limbs, and all his body over with this ſalt water, and immediately after put on his cloaths without drying his ſkin. Bay ſalt is the beſt, if it may be had. This wonderfully ſtrengthens and braces all the muſcular fibres, and covers the ſkin with a kind of ſaltiſh cruſt, which prevents all feveriſh infections. This whole proceſs may be executed in three minutes, and effectually embalms and preſerves the body from danger for that day.

This

This is a not mere theory, it is confirmed by experiments; and they who will obſerve theſe eaſy rules may live as ſafely, and enjoy as good health in the hotteſt climates, as we do in theſe temperate ones.

MATHEMATICAL CORRESPONDENCE.

To the Authors of the General Magazine.

Gentlemen,

THE following obſervations of the Solar Eclipſe, April 1, 1764, were made with 18 inch reflectors, to the time ſhewn by a very good eight-day clock, carefully compared and regulated for ſeveral days before. How far they may agree with thoſe made at the Royal Obſervatory, we cannot ſay; but if we ſhould differ a few ſeconds, it is only what more experienced obſervers, than we, are have done. ——— We make no apology for ſending them, ſo if you think them not worthy your notice, you need not make any, for neglecting them, to

Your humble ſervants,

Greenwich,
April 13, 1764.

J. MEADER.
G. CETII.

Morning, apparent Time.

Beginning 9h 4′ 42″, very exact.

At 11° 58′ 3″ a defect in the ſun's N. E. limb was very viſible, from which time, to 12° 0′ 6″, the ſun's limb could not be defined, then we had an indifferent obſervation, and judged the limb entire.

N. B. At 10° 28′ 30″, the two points of the luminous part were very nicely in an horizontal poſition, and the lower limbs of the two luminaries very near, but not perfectly coincident; that of the moon being a ſmall matter to the ſouth of the ſun, at which time about $\frac{9}{10}$ths of the ſun's diameter was eclipſed. ——— From hence it appears, that thoſe two nebulous aſtronomers, B——tts, and H——, who thought proper to find fault with Mr. Witchell's map and calculation, are themſelves moſt wretchedly miſtaken; and might either of them be thankful for a recommendation to the old woman of Batterſea, who bleeds for the ſimples.

To the AUTHOR *of the* GENERAL MAGAZINE.

SIR,

I Here ſend you the obſervation I made of the late ſolar eclipſe; which I hope will be found to be very exact, as I took all poſſible precaution to have it ſo. I had three watches (properly regulated for ſome time before) ſet to a good ſun-dial at eight o'clock the ſame morning,

I am, Sir, your moſt obedient ſervant,

Lincoln, April 16, 1764.

JOHN CLARKE

Apparent time at Lincoln.

	h	′	″
Beginning ———	9	4	0
Greateſt obſcuration —	10	28	0
End ———	11	55	0
Duration ——	2	51	0
Digits eclipſed	10°	30′	0″

To the AUTHOR *of the* GENERAL MAGAZINE.

SIR,

MR. T. Walker's criticiſm on, and ſolution to, my problem in your laſt magazine, appears to be the reſult of an immature judgment; every thing which that gentleman has advanced, is intirely foreign to the purpoſe; becauſe, the whole of his performance is founded on prop. 62, of Emerſon's Mechanics, whoſe circumſtances (a mathematician will eaſily ſee) are ſo materially different from thoſe of my queſtion, as to render the whole production of Mr. T. W. a manifeſt abſurdity.

The firſt time I ſaw Mr. T. Walker aſſume the character of a critic, was upon queſtion 292, propoſed by me in Martin's magazine, July 1760; which *(per* method of *ipſe dixit)* he boldly affirmed, was eſſentially the ſame as Mr. Bevil's 11th (211) queſtion, Gent. Diary, 1760;* my anſwer to which, probably, may account for thoſe "particular reaſons" of his, for publiſhing the late remarks.

But, with all this gentleman's pretended zeal to ſtem piracy, we ſhall find one of his name not ſo very innocent. To prove which, compare queſt. 308, Martin's mag. Nov. 1760, the ſolution, Jan. mag. 1761, with queſt. 5, (341) Ladies Diary, 1751, and its ſolution, Diary, 1752; then, we ſhall find that Mr. T. Walker has tranſcribed both Mr. Bevil's queſtion and ſolution *verbatim*.

Likewiſe, T. Walker's queſt. 311, Martin's mag. Dec. 1760, is *(verbatim)* the 6th (210) queſt. Lad. Diary, 1739; and the ænigma by T. W. Martin's mag. July, 1760, is remark'd (at p. 499,) Sept. mag. to be ſtole. Alſo, queſt. 348, by T. W. Martin's mag. Aug. 1761, is an abſurdity. See remarks at pages 41 and 58, Palladium, 1764.

* *Compare theſe problems and ſolutions, and then judge of their affinity.*

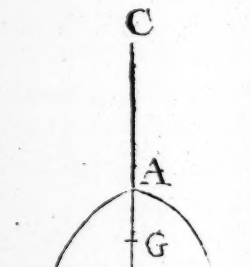
*** *We inſerted Mr. Walker's remark† purely becauſe we would not diſoblige him (whom we have reaſon to regard as an ingenious and uſeful correſpondent), common juſtice has laid us under the diſagreeable neceſſity of inſerting the above that our readers may have it in their power to judge for themſelves; and we ſhall be extremely glad to have the controverſy concluded, as things of this nature are wholly inconſiſtent with our plan, which is intended only to pleaſe and oblige all our correſpondents as far as our limits permit.*

† *Vide p.* 138.

MATHEMATICAL QUESTIONS, *anſwered.*

Queſt. 7. *anſwered by Mr.* David Waugh, *Teacher of the Mathematics at* Portſmouth.

PUT AC $= n$, $c = 3{,}1416$, S = ſolidity of the parabolic conoid BDAE, AB $= x$, BE $= $ BD $= y$, p = parameter of the parabola. Then, from p. 320 Emerſon's Fluxions, 2d ed. GC $= \frac{6n^2 + 8nx + px + 3x^2}{6n + 4x}$, the diſtance of the center of Oſcillation G from that of ſuſpenſion C, which, *per* queſtion, muſt be a minimum; but from p. 283, of the ſame author $\frac{cy^2x}{2} = S$, then $px = \frac{2S}{cx}$, which being ſubſtituted above, we have $\frac{6cn^2x + 8cnx^2 + 2S + 3cx^3}{6cnx + 4cx^2}$, or $\frac{6cn^2x + 8cnx^2 + 2S + 3cx^3}{3nx + 2x^2}$ a minimum. Put into fluxions we ſhall have $3cx^4 + 9cnx^3 + 6n^2cx^2 - 4Sx = 3Sn$, from whence, x may be found, and then y. Q. E. I.



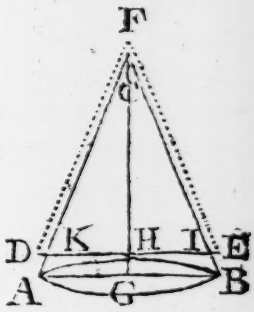
Cor. If $n = 0$ then will $x = \left|\frac{4S}{3c}\right|^{\frac{1}{3}}$ in this caſe.

This queſtion was likewiſe ſolved by Meſſrs. T. Walker, E. Smith, W. Barns, *and* T. Barker.

Queſt.

Queſt. 8. *anſwered by Mr.* G. Cetii.

LET A B C be the given cone, whoſe ſolidity will be found = 1026,2457, and the abſolute weight, *per Martin's Inſtitutes* (2054) = 142,5341 oz. and, *per* the ſame authority, an equal bulk of rain water will weigh 593,8922 oz. conſequently, the ſpecific gravity of theſe two bodies is 451,3581 = the abſolute weight of lead required *per* queſtion; the ſolidity of which will be ——— 77,9861



The ſuperficies of the curve ſurface A B C = 536,8733
Ditto of the baſe ——— 143,9384

Ditto of the whole cone — — 680,8117

⅔ of which is ——— ——— 453,8745

Per Eu. 47. 1. $\overline{GC}^2 + \overline{GB}^2 = \overline{BC}^2 = 596$; and *per* Simpſon's Geo. p. 77, ſimilar figures are to each other in a duplicate ratio, (or as the ſquares) of their like ſides. Therefore, 536,8733 : 596 :: 453,8745 : 503,8604 = $\overline{CI}^2$, whence C I = 22,447; again, 24,413 (B C) : 20 (C G) :: 22,447 : 18,389 = C H, *per* ſimilar triangles; once more, 24,413 : 16 (A B) :: 22,447 : 12,872 = K I, whence the ſolid content of the caſed part will be ——— ——— ——— 797,668
To which add the ſolid content of the lead — — 77,986

We have the content of the cone D E F = 875,654

which put = *s*, H I = *a*, H C = *b*, *r* = ,7854, and *x* = H E. Then $a : b :: x : \frac{bx}{a}$ = H F, and $4rx\,a \times \frac{bx}{3a} = s$, whence $x = \sqrt[3]{\frac{3as}{4br}} = 6{,}624$, and $x - a$, or I E = ,188. W. W. R.

This queſtion was alſo anſwered by Meſſrs. Banks, Barker, Waugh, Dalby, Adams, Barns, Brown, Smith, G. R. Wilkin, *and* Walker, *the propoſer. Moſt of theſe gentlemen differ from each other in the numbers which they uſe for the ſpecific gravities of the bodies: this occaſions a difference in their concluſions.*

Queſt. 9. *anſwered by Mr.* T. Walker, *of* Stantonbury, Bucks.

PUT *a* = diagonal of the cylinder; its altitude = *x*; and *p* = ,7854; then *per* 47 E. 1. $\sqrt{a^2 - x^2}$ = diameter of its baſe; and by menſuration, $2a^2p - 2x^2p \times x = 2a^2px - 2x^3p$ = ſolidity, *per* queſtion, a maximum; which, or $2a^2x - 2x^3$, in fluxions is $2a^2\dot{x} - 6x^2\dot{x} = 0$; therefore $6x^2 = 2a^2$ and $x = \sqrt{\frac{1}{3}}\,a$ = altitude, and $\sqrt{\frac{2}{3}}\,a$ = diameter required.

N. B. This gentleman obſerves, that this queſtion is tranſcribed from one of the Palladiums. ——— We have already taken notice of the heinouſneſs of this practiſe, and are ſorry our remonſtrance has not had the deſired effect: certainly no perſon, who has the leaſt regard for his own character will ever attempt ſuch a thing, as it never eſcapes being detected, and is always attended with the ignominy it deſerves.

In the ſame manner this queſtion is ſolved by Meſſrs. Banks *(the propoſer,)* Barker, Waugh, Dalby, Adams, Barns, G. R. Tarratt, Huſband, Smith, Hyde, Wilkin, Sewell, Rotheram, Conditt, *and* Cetii.

Queſt. 10. *anſwered by Mr.* Iſaac Dalby, *the propoſer.*

PUT the number of angels $= x$; number of guineas $= y$; and the number of moidores $= z$; then, *per* the queſtion, we have $10x + 21y + 27z = 400$; by tranſpoſition we have $400 - 21y - 27z = 10x$, and $\frac{400 - 21y - 27z}{10} = x =$ a whole number; now ſuppoſe y and $z = 0$ (0 being to be included, by the queſtion,) we have 40 for the greateſt value of x; for $\frac{400}{10} = 40$; now ſuppoſe $z = 0$, only; the leaſt value of y in a whole number, will be 10, and the correſponding value of $x = 19$; next, ſuppoſe $z = 1$; we have $\frac{400 - 21y - 27}{10} = x$, or $\frac{373 - 21y}{10} = x$, a whole number, and conſequently the leaſt value of y, in this caſe, is 3; and the correſponding value of x is 31; now by adding the co-efficient of x to the leaſt value of y; and ſubtracting that of y from the greateſt value of x, we get $y = 13$, and $x = 10$; again, ſuppoſe $z = 2$, by proceeding as above, we have 6,16 for the the values of y; and 22,1 for the values x, when $z = 2$; by proceeding in this manner, the number of anſwers will be found $= 16$. W. W. R.

With ſome variation, the ſolution of this queſtion is given by Meſſrs. Cetii, Conditt, Sewell, Smith, R. N——n, G. R. Barns, Adams, Waugh, Barker, *and* Banks.

New QUESTIONS *to be anſwered.*

Queſt. 17. *By Mr.* T. Barker, *of Wiſſett, in Suffolk.*

GIven the periphery of an ellipſis $= p$, and the rectangle of the latus rectum, into the difference of the diameters thereof $=$ a maximum: query the dimenſions?

Queſt. 18. *By Mr.* G. Brown, *teacher of the mathematics in the Tree-rope-walk, Portſmouth-common.*

REquired, the dimenſions and area of the greateſt ellipſis that can be inſcribed in a common parabola; abſciſſa $= 44$, and Semi-ordinate $= 56$.

Queſt. 19. *By Mr.* B. Rotheram, *of* Rotheram.

TWO ſhips under the equinox, their diſtance 100 miles, ſet ſail in the following manner; the eaſtermoſt ſails exactly ſouth, after the rate of 5 miles *per* hour, and the weſtermoſt ſhip keeps the ſame diſtance from the eaſtermoſt ſhip, ſhe ſet ſail with, (namely 100 miles) and always in the ſame north latitude, as the other's ſouth latitude; required how many miles *per* hour, the weſtermoſt ſhip muſt ſail, to come under the ſame meridian with the eaſtermoſt ſhip, according to plain ſailing.

Queſt. 20. *By* Stamfordienſis.

MR. Landen, in his Reſidual Analyſis, has, by dividing $v^{\frac{m}{r}} - w^{\frac{m}{r}}$ by $v - w$, and a few other theorems, been enabled to ſolve the moſt difficult problems in the mathematics, upon the common principles of algebra, without fluxions; now this quotient he expreſſes thus,

$$\frac{v^{\frac{m}{r}} - w^{\frac{m}{r}}}{v - w} = v^{\frac{m}{r} - 1} \times \frac{1 + \frac{w}{v} + \left|\frac{w}{v}\right|^2 + \left|\frac{w}{v}\right|^3 \ (m)}{1 + \left|\frac{w}{v}\right|^{\frac{m}{r}} + \left|\frac{w}{v}\right|^{\frac{2m}{r}} + \left|\frac{w}{v}\right|^{\frac{3m}{r}} \ (r)}$$

m and r being poſitive integers. The inveſtigation thereof is required?

Apparent

Apparent Times of the Eclipſes of the Satellites of Jupiter *which will happen in* May, 1764, *computed, from New Tables, to the Meridian of the* ROYAL OBSERVATORY *at* GREENWICH.

I. Satellite. Emerſions.				II. Satellite. Emerſions.				III. Satellite.				IV. Satellite.			
D	H.	M.	S	D	H.	M.	S.	D	H.	M.	S.	D	H.	M.	S.
1	19	0	21	17	17	20	18	2	8	16	2	5	4	35	5 E
3	12	29	24	19	11	49	1	5	21	34	30	12	8 *	35	50 E
5	7 *	58	25	21	6	17	43	9	10	51	40	19	12	36	42 E
7	2	27	23	23	0	45	23	13	0	10	53	26	16	37	0 E
8	20	56	18	24	19	15	1	16	13	28	58				
10	15	24	44	26	13	43	37	20	2	46	47				
12	9	53	58	28	8 *	12	12	23	16	4	21				
14	4	22	26	30	2	40	45	27	5	22	1				
15	22	51	33												

D	*Other celeſtial Phænom. this month.*
3	Venus will almoſt touch a ſtar of *Auriga*.
19	Venus near ε of *Gemini*.
21	Sun in the parallel of *Arcturus*.
26	Venus near κ of *Gemini*.

D	Inch.	D	Inch.	D	Inch.	D	Inch.
1	29.85	9	32.15	17	31.00	25	31.00
2	29.90	10	32.00	18	31.15	26	32.50
3	30.00	11	31.50	19	32.00	27	33.00
4	30.10	12	32.00	20	33.10	28	31.00
5	30.10	13	32.05	21	32.95	29	32.00
6	30.30	14	32.35	22	33.00	30	30.00
7	31.00	15	32.00	23	31.04	31	32.14
8	32.00	16	30.00	24	30.50		

Barometrical Obſervations, *made at* Stanton-Bury, Bucks, *Lat.* 52° 4′ N. *Long.* 47′ W. *from* London, March, 1764. *By* T. Walker.

POETRY.

On the terrible HAIL-STORM, *which happened in the counties of Kent and Suſſex the* 19*th day of Auguſt*, 1763.

Intonuere poli & crebris micat ignibus æther.
VIRG. ÆN. lib I. 94.

E're rural care collected from the fields,
The meſſed burden bount'ous nature yields;
E're man with ſickle from the root had ta'en
The yellow crop, or bound the ſtrawy chain;
E're clouds the morning's azure boſom ſtain'd;
When winds were lull'd aſleep, and calmneſs reign'd;
Man ſally'd forth, joy following in his train,
To view the fertile product of his grain:
When lo! a black'ning ſtorm appears ſouth-weſt,
In garb tremendous; by wild horror dreſt:
Awhile it threatens veng'ance on the ſhores,
Fell lightnings flaſh, and awful thunder roars:
Inſane convulſions nature's face deform,
Dire rage, with fury guide the dreadful ſtorm,
Which, fraught with anger, baneful influence ſent
O'er part of Suſſex and o'er part of Kent:
With force impetuous rattl'ing hail was hurl'd,
Pouring its fury o'er a guilty world:
The rapid whirlwind twiſted from the oak
Extended limbs; whilſt pond'rous trunks were broke:
Swift down the rocks polluted torrents roar,
And foaming ſurges waſh the yielding ſhore;
Such various ſigns the horrid ſcenes diſplay,
No faint reſemblance of the judgement day.
Man trembled, conſcious, at th' Almighty's rod,
And fear'd a ſummons by the trump of God:
To fear he'd cauſe; his ſins of blackeſt dye,
Aloud had challeng'd veng'ance from on high;
Repeated guilt his maker's anger rais'd,
For him the thunder roar'd and lightnings blaz'd.
The god of veng'ance, by the world rever'd,
Rode the dire ſtorm, tremendouſly appear'd;

Rais'd was his pow'rful arm to hurl below,
Eternal ruin on his wretched foe:
When mercy catch'd the thunder from his hand,
And interceded for a guilty land:
This ſtorm, pray'd ſhe, be as a terror ſent
To man, whom ſenſe will ſurely make repent;
Tho' ſins of ſcarlet dye for juſtice call,
And imp'ous man has merited his fall,
Yet mercy ſtill for pardon ſues and pleads;
Spare man a little, he'll amend his deeds.
Pardon, th' Almighty ſaid, awhile takes place,
I'll view the amendment of the guilty race.
He ſpoke! away the roaring tempeſts flee,
And quench their fury in the foaming ſea:
The ſtorm ſubſides! Man treads the ruin'd plains,
Dejected views the damage he ſuſtains.
Alas! what devaſtation near and far,
Like the wide ravage of devouring war:
Juſt now he ſmil'd to view his weighty crops,
His wheat, his barley, apples, oats and hops;
The fruitful heap the earth ſo late did yield,
The furious hail has ſcatter'd o'er the field:
Juſt now rejoic'd to think his rural board,
Wou'd wheaten loaf or cup of beer afford;
But ah, alas! his expectations fall,
He's loſt his labour, harveſt, and his all;
Poor meagre want is ſeated in their place,
And ghaſtly famine ſtares him in the face.
But ſee, his loſſes reach the liſt'ning ears,
Of thoſe where perfect charity appears;
No ſooner humane Romney heard his cries,
His loſs redreſſes, and defects ſupplies:
Twiſden and Botelor eſpouſe the cauſe,
Ryder and Filmer, practiſe equal laws,
Relieve diſtreſs, and gain their maker's and the world's applauſe.

Tunbridge. H. HARPUR.

An EPITAPH *on a ſquirrel ſoldered up in a tin caniſter. Attempted in the* Lapidarian *ſtyle.*

Within this ſarcophagus
Are included the remains of little Bobby,
Who met with an untimely fate
By the mercileſs and accurſed paws
Of Grimalkin:
A cataſtrophe not to be remembered
Without a pang or a tear!
Chains were deviſed for ſavage ſquirrels.
Bobby knew them not nor needed them.
He was all lovely, loving and gentle,
Saluting even ſtrangers with a kiſs.
He died a bachelor, in the third year of his age,
And in the ſecond of king George the third.
By his will, found in his ſtrong box,
He bequeathed his whole perſonal eſtate,
Of filberds, piſtachio nuts and napies biſcuits,
To the little maſters and miſſes who uſed to viſit him.
Know reader,
Should'ſt thou preſume to violate his ſepulchre,
He will ſurely eſcape thy impious hands,
And fly away to the Elyſium
Of pretty harmleſs animals.

An ÆNIGMA.

OF high deſcent let others proudly boaſt,
And honours gain'd by ſome important poſt.—
All this I wave, though 'tis my rightful claim
To ſerve you here in ænigmatic name.
Proteus and a thouſand ſuch can I,
For antic ſhapes, with greateſt eaſe out-vie.
Theſe are ſome of the ſtrange forms I wear:
Sometimes a lion—then a cock appear.—
Sometimes all head—then nothing am but arms.—
Nay often am dreſt up in female charms.
Am now a caſtle—then become a moon—
A man of war—or nothing but a gun—
A ſtately oak—a tender fruitful vine—
A coach and ſix—a gaudy peacock fine—
A king—a ſlave—a crown—a ſtar and garter,—
And ſometimes thought a great prognoſticator.
For I in myſtic ſcience greatly deal,
And deep equations only I reveal.
Upon the earth I'm very rarely found,
For 'mongſt the ſtars I take my yearly round.
To my deſcription now to put an end
Subſcribe myſelf your ſervant and your friend.

Orwell, April 10, 1764. T. ADAMS.

A Rebus, for Mr. Swift.

IF to a lovely bird be join'd
The half of one of Judah's ſons,
An antient ſea-port town you'll find,
That's ſtrongly fortify'd with guns.

JOHN CLARKE.

Anſwer to the ÆNIGMA *and* REBUS *in the Magazine for February.*

WHEN phebus clear, celeſtial orb of light,
Appeared in this our hemiſphere ſo bright;
I took the BELLOWS for to blow the fire,
At FINEDON villa by a friend's deſire:
Then, for amuſement, in the next known ſcene,
We order'd ſtraight your famed Magazine,
And weigh'd each line with prudent ſkill and care,
And ſaid, no others could with your's compare.

Finedon, April 13, 1764. G. HARRIS.

Anſwer to the Ænigma, p. 143.

LET time roll on, tho' ne'er ſo faſt,
TRUTH will exiſt, when falſhood's paſt.

St. Paul's Church Yard. R. P.

Two

Two ſongs from Mr. COOPER*'s poems.*

SONG I.

DEAR Chloe, what means this diſdain,
Which blaſts each endeavour to pleaſe?
Tho' forty, I'm free from all pain,
Save love, I am free from diſeaſe.
No graces my manſion have fled,
No muſes have broken my lyre;
The loves frolic ſtill round my bed,
And laughter is chear'd at my fire.

To none have I ever been cold,
All beauties in vogue I'm among;
I've appetite e'en for the old,
And ſpirit enough for the young.
Believe me, ſweet girl, I ſpeak true,
Or elſe put my love to the teſt;
Some others have doubted like you,
Like them do you bleſs and be bleſt.

SONG II.

THE nymph that I lov'd was as chearful as day,
And as ſweet as the bloſſoming hawthorn in May,
Her temper was ſmooth as the down on the dove,
And her face was as fair as the mother's of love.

Tho' mild as the pleaſanteſt zephyr, that ſheds,
And receives gentle odors from violet beds,
Yet warm in affection as Phœbus at noon,
And as chaſte as the ſilver-white beams of the moon.

Her mind was unſullied as new-fallen ſnow,
Yet as lively as tints of young Iris's bow,
As firm as the rock, and as calm as the flood,
Where the peace-loving halcyon depoſits her blood.

The ſweets that each virtue or grace had in ſtore,
She cull'd as the bee would the bloom of each flow'r;
Which treaſur'd for me, O! happy was I,
For tho' her's to collect, it is mine to enjoy.

To a friend, on ſome ſlight occaſion, eſtranged from him. By Mr. Shenſtone.

HEalth to my friend, and many a chearful day,
Around his ſeat may peaceful ſhades abide!
Smooth flow the minutes fraught with ſmiles, away,
And, 'till they crown our union, gently glide.

Ah me! too ſwiftly fleets our vernal bloom!
Loſt to our wonted friendſhip, loſt to joy!
Soon may thy breaſt the cordial wiſh reſume,
E're wintry doubt its tender warmth deſtroy.

Say, were it ours, by fortune's wild command,
By chance to meet beneath the torrid zone,
Wouldſt thou reject thy Damon's plighted hand?
Wouldſt thou with ſcorn thy once lov'd friend diſown?

Life is that ſtranger land, that alien clime:
Shall kindred ſouls forego their ſocial claim?
Launch'd in the vaſt abyſs of ſpace and time,
Shall dark ſuſpicion quench the gen'rous flame?

Myriads of ſouls, that knew one parent mold,
See ſadly ſever'd by the laws of chance!
Myriads, in time's perennial liſt enroll'd,
Forbid by fate to change one tranſient glance!

But we have met—where ills of ev'ry form,
Where paſſions rage, and hurricanes deſcend:
Say, ſhall we nurſe the rage, aſſiſt the ſtorm?
And guide them to the boſom—of a friend?

Yes, we have met—thro' rapine, fraud, and wrong:
Might our joint aid the paths of peace explore!
Why leave thy friend amidſt the boiſt'rous throng,
E're death divide us, and we part no more?

For oh! pale ſickneſs warns thy friend away!
For me no more the vernal roſes bloom!
I ſee ſtern fate his ebon wand diſplay;
And point the wither'd regions of the tomb.

Then the keen anguiſh from thine eye ſhall ſtart,
Sad as thou follow'ſt my untimely bier;
"Fool that I was—if friends ſo ſoon muſt part,
To let ſuſpicion intermix a fear."

The CHAPLAIN.

PArſon! 'tis falſe; I'll ne'er believe
You value freedom, as *you* live:
You hug your chains, and cut your jokes
On *us*, poor independent folks.——
But wou'd you then indeed be free?
Come; I'll preſcribe—*without* a fee.
Firſt then, 'tis plain you love to eat,
And haunt the tables of the great:
You ſhun the man, and think him poor,
That cannot give you "four and four."
Indeed, my friend, this muſt *not* be;
A paraſite can ne'er be free.
Next, Doctor, you muſt drink no wine—
Ch. Why ſo? St. *Paul*, that great divine,
Says, "drink a little"—*F.* That's not the queſtion:
You cann't afford it.—*Ch.* But for digeſtion—
F. A glaſs of cyder, or old mead,
Or ev'n mild ale will do the deed.

Then,

Then, you're a captain in your dreſs;
A good black frize would coſt you leſs;
And look more venerable too,
Than that *grey* cloth — which I call *blue*.
Talk what you pleaſe, you'll ne'er be free,
If you deſpiſe œconomy.
Perhaps too, you may think a wife
Amongſt the requiſites of life.
Why, take ſome healthy, farmer's daughter,
Some *Blouſelind* — nay, ſpare your laughter:
She'll mend your ſhirts, inſpect your brewing —
A lady, Sir, wou'd be your ruin.
Your pars'nage-houſe, I own, is mean;
But, ſee! that fragrant jeſſamine;
See! how that wood-bine round the door,
And latteſs blooms — What wou'd you more?
Oh! doctor, cou'd you but deſpiſe
Life's pompous ſuperfluities;
Cou'd you but learn to live content
With what indulgent heaven has ſent;
Whate'er your lot, you'd live more free
Than any prince in — *Germany*. —

Spoken extempore by a young lady of ſeventeen, on ſeeing his royal highneſs the prince of Oſnaburgh dreſſed in purple and ſilver.

Behold a biſhop and a prince;
The badge of truth he wears:
No paſtor ſure, with heart ſo pure,
Theſe ſeventeen hundred years.

May's-Buildings, April 4.

N. B. *Mr. Sadler's, and ſeveral other pieces, came too late to be inſerted this month.*

Our Correſpondents are deſired to take notice, that we obſerve the old rule (except when it is proper to deviate from it) of firſt come firſt ſerved. *We therefore beg them to be as early as convenient in ſending their favours.*

*** *The favours of Mr.* Harlock *will be very acceptable.*

A Candid Review *of* New Books.

Art. 1. Political Theatre. Wilkie. 4to. Price 1s. 6d.

Supposes the lords and gentlemen of the minority, who have occaſionally met in Albemarle-ſtreet, are a parcel of players, and acting upon a ſtage there the ſeveral parts they have *really* performed in the different employments from which they were diſmiſſed.

Art. 2. *A letter to the gentlemen in the oppoſition. Wilkie. 4to. Price 1s.*

A very inſipid collection of a few ſtale arguments, which have been banded about in the news-papers. The writer ſays he is a *countryman*; and probably he is, for he ſeems to know very little of what paſſes in town.

Art. 3. *A letter from Albemarle-ſtreet, to the Cocoa-tree. Almon. 4to. Price 2s.*

In this political pamphlet the principles of ſome of the gentlemen, frequenting the Cocoa-tree, are ſtated, and a repreſentation of their conduct during the preſent reign. High compliments, however, are paid to ſome, who, during the late ſtruggles, remained independent, and were conſequently in the intereſt of their country. A ſtrong reply is given to a late ſtate of public affairs. So that this pamphlet is, upon the whole, extremely proper to be peruſed by all who would wiſh to be informed of the ſtate of parties, and the ſentiments of ſome of the Great. For ſpirit and ſtile of the writer, we ſhall ſelect one paſſage (*vide* page 31,) by way of ſpecimen.

"In the next long and laborious declamation, of a right honourable gentleman, it is hoped he will, as conciſely as he can, ſtate to us, without a fallacy, how moderate a proportion the whole charge of the German war bears to the whole of our national expence, from 1757 to the time of the reſignations of his family: he will next candidly take to his own ſhare, and to that of his worthy fellow labourers, the amount of the two laſt campaigns, more coſtly than any of the preceding. He will pleaſe likewiſe to favour us with his opinion, touching the enormous increaſe of expence, which muſt neceſſarily have fallen upon other branches, if we had diſcontinued, or not engaged in the continental plan, by which the whole force of France was kept at bay. He will mark out to us too how Portugal (by them a ſuperadded continental operation) could have been defended at all, if the houſe of Bourbon had been left lords paramount of Europe; and what the conſequence muſt have been, to this commercial iſland. He will likewiſe be ſo kind as to inform us, what inſurance office there is for the ſucceſs of their plan, if they ever had any, the experiment of which however they never dared venture, thank God! When all this is done, the degree of his fault, in keeping an *intereſted* ſilence for ſo many ſeſſions, may

may be fixed. To his great honour be it further remembered, he afterwards railed at and continued to ſupport the very ſame meaſure. Tho' if it could ever be wiſe, or not the height of folly, to make ſo very hazardous an experiment as that of abandoning the continent, it muſt have been towards the cloſe of this triumphant war, when the houſe of Bourbon was ſo reduced, that there was ſcarce any thing left to conquer; the facility of retaining and compleating ſeeming to be almoſt as great as that of ſurrendering our conqueſts."

ART. 4. *Matrimony made eaſy: or, a new form of marriage, founded on the principles and practice of the holy patriarchs, and the laws of God and nature, &c. Sandby.* 8vo. *Price* 1s.

This piece (which the title ſays is written by a biſhop of the church of England) is in the form of a petition to the houſe of commons, requeſting [in ſubſtance] that the ceremony of marriage, in the Engliſh church, may be in the ſame manner as is admitted by the quakers and jews; that is, by a declaration of approbation by both man and woman, made and ſigned before witneſs. Whether the houſe of commons ſhall think this worthy of being taken into their *moſt ſerious* conſideration is a doubt; but if they ſhould, we will venture to ſay, that they will want ſome *better aſſiſtance* than the writer of this pamphlet ſeems able to give.

ART. 5. *Poems on ſeveral Subjects. Dodſley.* 8vo. *Price* 2s. *ſewed.*

Theſe poems, except two ſongs, [*See page* 193,] have been occaſionally publiſhed either in news-papers, magazines, &c. or in ſeparate pamphlets. As the public have already formed a judgment of them, perhaps as agreeable as the very ingenious author could wiſh, it only remains for us to acquaint the public with his name, which is Mr. Gilbert Cooper. They conſiſt of the four epiſtles from Ariſtippus; an epiſtle from the king of Pruſſia to Voltaire; a hymn to health; the genius of Britain, to Mr. Pitt; Theagnes to Sylvia; the power of harmony; a father's advice to his ſon; the tomb of Shakeſpear; and two ſongs. Mr. Dodſley has collected them by permiſſion of the author.

ART. 6. *The Conteſt. A Poem. Almon.* 4to. *Price* 1s. 6d.

A ſmall, but ſevere poem, occaſioned by the late conteſt at Cambridge. The following lines will ſerve for a ſpecimen.

Thou fawning paraſite! thou wretched tool!
Thou proud Coloſſus of a royal ſchool!
Say, what could move thee to betray a niece,
To ſell her honour, and to wound her peace?
Think of the tie of nature — think of her
Who once was honeſt, as ſhe once was dear.
You *ſold* your niece — and wouldſt thou ſell thy child?
Oh, tell me (ſatire's voice is too, too mild)
Wouldſt thou condemn her to a ſtateſman's arms,
And for a mitre truck her maiden charms?

ART. 7. *Privilege. A poem. Ridley.* 4to. *Price* 1s. 6d.

This is doubtleſs the production of the ſame author as the chaplain (ſee page 98,) and carries with it, in many places, the marks of true genius, and excellent compoſition. The beginning, however, is tedious and unintereſting, which makes it appear at firſt languid and indifferent; but after we have paſſed the drudgery of the long invocation, we come to ſomething ſpirited and ſmart towards the end. The following lines are the concluſion, from which our readers will judge of the writer's poetical merit.

If genuine LOYALTY demand thy care,
Turn to a LITCHFIELD's heart, and ſee her there;
She bids a PHILIPS tow'r ſupremely great,
True to his king, and faithful to the ſtate.
See ſacred wiſdom with a full control,
Spreads her bright radiance on a DASH—D's ſoul;
Center'd in worth, ſee *principle* impart,
Her pureſt influence to a GRE—LE's heart;
Unſway'd by faction, and a foe to ſelf,
Steel'd to corruption, and no tool to ſelf,
What if he quits the paths he trod before?
— His *kindred* MUCH he loves, his country MORE.
Such bliſsful ſcenes our golden times diſplay,
And ſuch the *morning* of a GEORGE's ſway.

ART. 8. *The hiſtory of the riſe and progreſs of poetry, through its ſeveral ſpecies. By Dr. Brown. Davis and Reymers.* 8vo. *Price* 3s.

Some time ago Dr. Brown publiſhed a thin quarto volume entituled "A diſſertation on the riſe, union, and power, the progreſſions, ſeparations, and corruptions of poetry and muſic." From *that* work, *this* is extracted, being only what related to *poetry*, in that piece. The doctor has made this ſeparation for the benefit of ſuch as are not converſant with muſic. Whether this be an object worthy of the public attention may be doubted; becauſe, in the firſt place, the ſubject is far from being either important

tant or intereſting; and, in the next, when an author preſumes extremely on his own *affected* merit, the candid and judicious (who have been his beſt friends) are apt to treat him with the contempt that his pride and aſſumption deſerves. Dr. Brown ſeems unhappily to have fallen into a ſnare of this kind: for his diſſertation on the riſe, union, &c. of poetry and muſic, did not meet with any thing like ſo good a reception from the public as his other pieces: Where then was the uſe of *this* publication, which is only extracted from *that?* If the doctor did not think his piece had *more merit* than the public ſeemed willing to allow? As the public are already in poſſeſſion of the ſubſtance of this work, and have already formed a judgment upon it, we ſhall not trouble them with any extracts from it, leſt they ſhould happen to be no more than what perhaps moſt of our readers have already ſeen.

ART. 9. *An enquiry into the human mind, on the principles of common ſenſe. By Thomas Reid, D. D. profeſſor of philoſophy at Aberdeen. Millar.* 8vo. *Price* 6s.

This work is a dry diſſertation on the five ſenſes, viz. ſmelling, taſting, hearing, touching, and ſeeing. After the great Mr. Locke had wrote ſo ably upon this ſubject one cannot but be ſurprized to ſee another attempt to excel him. As a ſpecimen of Mr. Reid's view of the human underſtanding (for ſuch he intends his book to be) which he ſays is different from Mr. Lock's, we ſhall preſent our readers with the following extract upon *ſenſation*, which is under the diviſion of *ſmelling*, on which they will pleaſe to form their own judgments. "Let us now attend carefully to what the mind is conſcious of when we ſmell a roſe or a lilly; and ſince our language affords no other name for this ſenſation, we ſhall call it a *ſmell* or *odour*, carefully excluding from the meaning of thoſe names every thing but the ſenſation itſelf, at leaſt till we have examined it. Suppoſe a perſon who never had this ſenſation before, to receive it all at once, and to ſmell a roſe; can he perceive any ſimilitude or agreement between the ſmell and the roſe? or indeed between it and any other objects whatſoever? certainly he cannot find himſelf affected in a new way, he knows not why or from what cauſe. Like a man that feels ſome pain or pleaſure, formerly unknown to him, he is conſcious that he is not the cauſe of it himſelf; but cannot from the nature of the thing, determine whether it is cauſed by body or ſpirit, by ſomething near or ſomething at a diſtance. It has no ſimilitude to any thing elſe ſo as to admit of a compariſon; and therefore he concludes nothing from it, unleſs perhaps that there muſt be ſome unknown cauſe for it. It is evidently ridiculous, to aſcribe to it figure, colour, extenſion, or any other quality of bodies. He cannot give it a place, any more than he can give a place to melancholy or joy; nor can he conceive it to have any exiſtence but when it is ſmelled, ſo that it appears to be a ſimple and original affection or feeling of the kind, altogether inexplicable and unaccountable. It is indeed impoſſible that it can be in any body: it is a ſenſation, and a ſenſation can only be in a ſentient thing."

ART. 10. *Corpus Legum Sacrarum de moribus reformandis. Being a collection of the ſeveral texts from the Old and New Teſtament againſt the moſt predominant vices and ruling paſſions; and for the encouragement of their oppoſite virtues, alphabetically digeſted under their proper heads, in two books. Blyth,* 8vo. *Price* 2s.

The vices of human nature are alphabetically arranged in the firſt book; and under each article are placed the ſeveral paſſages in ſcripture, forbidding ſuch crime being committed, as for inſtance

MURDER

He that *killeth* any man ſhall ſurely be put to death. *Lev.* xxiv. 17.

Life ſhall go for *life*. *Deut.* xix. 21.

The ſecond book conſiſts of exhortations; *i. e.* commanding ſuch and ſuch things to be done: as for inſtance

FORGIVENESS

Forgive, and ye ſhall be forgiven. *Luke* vi. 37.

Forgive one another, even as GOD for CHRIST's ſake hath forgiven you. *Eph.* iv. 32.

ART. 11. *The hiſtory of St. Kilda. By the Rev. Mr. Kennet Maccaulay. Becket.* 8vo. *Price* 4s. *in boards.*

St. Kilda is a little barren iſland among the weſtern iſles of Scotland, between two and three miles long, and about one and a half broad, inhabited as the author acknowledges, in page 196, by only eighty eight perſons. One would therefore wonder how the account of ſuch a little place, ſcarce noticed by the beſt geographers with no one thing remarkable in it, could be contrived to make a volume in octavo. But ſo it is, Mr. Maccaulay, in order to do the greateſt honour to St. Kilda, has made the account as pompous and as large as he could; and his ingenuity (not his language, for in ſome places it is not grammar) on this occaſion, is entitled to the higheſt commendation; for if we except one or two

paſſages

paſſages in his work, and were then to put it into the hands of a ſtranger, St. Kilda would appear to him as a place of great note and the inhabitants the moſt humane good people upon the earth, conſequently he would be amazed that he had not heard of it before. However, Mr. Maccaulay, has eked out his deſcription with ſeveral particulars as little intereſting as St. Kilda itſelf: among which is his voyage to St. Kilda, from a neighbouring iſland: the natives in two bodies throwing themſelves into the water, and hawling his boat aſhore, &c. &c. The ſubſtance of his deſcription may be reduced to the following. The coaſt of St. Kilda is rocky and dangerous to approach: the inhabitants live in little huts made of ſtone, and are exceſſively poor and needy: they catch fiſh and wild fowl for their ſubſiſtence, were very civil to the author, but ſtink moſt intolerably, either owing to their own national naſtineſs, and to entire want of linen, or the extreme thickneſs of the weather, which renders the iſland very unhealthy. There are ſome old buildings of churches, ſome relics of Paganiſm, and ſome ſacred fountains. The whole iſland is the property, ſays Mr. Maccaulay, of Norman Mac Leod of Mac Leod: and he has given a leaſe of it to a cadet of his own family, who is called the ſteward, and is indeed lord Paramount, to whom the poor inhabitants pay an annual tribute of eleven pounds ſterling, in barley and feathers. As a ſpecimen of our author's work we ſhall ſingle out one of his moſt entertaining paſſages. "During the ſummer ſeaſon, the women, like the maids of Sparta, are much employed in fowling. The principal game that falls to their ſhare, is the ſmall ſprightly bird called the puffin. This fowl hatches under-ground, and is eaſily traced out by means of the hole through which it makes its way: the hole it digs with its beak. The wife or daughter of a family makes a ſhort excurſion from home in a morning, attended by a dog, and catches what may be proviſion for a whole family, at leaſt for one day; every family in the iſland is furniſhed with one or more of theſe extraordinary dogs. They are a mixture of the tarrier, ſpaniel, and thoſe that take the water: of their own accord they ſally out early enough and ſoon return, bringing five or ſix puffins at a time.—Setting on the ſide of a hill with ſome of the people, I ſaw one of theſe little dogs ſtealing away from us: the men told me he would ſoon return with a conſiderable booty, accordingly he came back in half an hour and laid down his prey at his maſter's feet; being taught by experience and ſome friendly ſtroakings, that his owner had a juſt ſenſe of the obligation, he went off a ſecond time, and had much the ſame ſucceſs. Theſe dogs have a *wonderful* ſagacity, and are ſo trained, that they neither deſtroy the fowls themſelves, nor part with them till they meet the people of the family to which they belong, in ſpite of threatenings, flattery, or bribes."

ART. 12. *The Ruins of Netley Abbey. A Poem. By George Keate, Eſq; Dodſley. 4to. Price 6d.*

"The remains of Netley Abbey, ſays Mr. Keate, are ſituated on the ſide of the Southampton river, about three miles from that town. It was a monaſtery founded by king Henry III. in the year 1239, for Ciſtercian monks, and dedicated to St. Mary and St. Edward. The grand and extenſive ruins which are ſtill exiſting, added to the beauty of the ſcenery around them, much attract the curioſity and admiration of ſtrangers." The poem is ſhort, but pretty, and ſhews Mr. Keate to be no indifferent poet. The verſification is eaſy and elegant, the language pure, and the ſentiments happily adapted. There is ſomething extremely ſympathetic and pleaſing in the following lines:

"Haunts ſuch as theſe delights, and o'er the ſoul
A while their grateful melancholy caſt,
Since through all periods ſhe can boundleſs roll,
Enjoy the preſent, and recal the paſt!——
Here, pious hermits from the world retir'd
In contemplation wing'd their thoughts to heav'n;
Here with religion's heart-felt raptures fired,
Wept o'er their erring days, and were forgiv'n.
Race after race ſucceeding, in theſe cells,
Learn'd how to value life, learn'd how to die;
Loſt are their names, and no memorial tells
In what lone ſpot their mouldering aſhes lie!"

We need only inform our readers that this little poem conſiſts of twenty-three more ſuch verſes.

ART. 13. *The Right of Appeal to Juries, in Caſes of Exciſe, aſſerted. Towers. 8vo. Price 1s.*

This piece goes more into the ſerious buſineſs of the late exciſe upon cyder than any thing hitherto publiſhed, as it examines and ſtates both the right and neceſſity of appeal to juries in cauſes of exciſe.

ART. 14. *The works in verſe and proſe of William Shenſtone, Eſq; 2 vols. 8vo. Dodſley. Pr. 12s.*

The editor (Mr. Robert Dodſley) has been at no ſmall pains in collating and making fit for the public eye the works of the late Mr. Shenſtone of the Leaſowes near Birmingham; he has likewiſe added a great number of beautiful decorations, all which are finely engraved. The firſt volume conſiſts of Mr. Shenſtone's poetical pieces: his merit as a pleaſing poet, is pretty well eſtabliſhed; therefore all thoſe who have read and admired his detached pieces hitherto publiſhed, will doubtleſs be glad of ſeeing here a beautiful edition of the whole (ſee page 193.) The ſecond volume conſiſts of his proſe works, which is indeed but middling; for neither the ſtile nor the compoſition are extraordinary. As a poet Mr. Shenſtone will live; and though he cannot be reckoned among the firſt rate, he will with great juſtice come into the ſecond: as a proſe writer he will be almoſt diſregarded; for if we except ſome few odd thoughts, his proſe is nearly deſtitute of merit. But as a man in private life, he will ever be adored, by thoſe who knew him; and thoſe who had not that happineſs, will, upon reading the ſketch of his life by the ingenious and candid editor, prefixed to the firſt vol. be in love with his character. We have but one obſervation more to make, which is, that theſe volumes do equal honour to both editor and author. May all good men like Mr. Shenſtone meet with the ſame juſtice after they have paid the debt of nature.

ART. 15. *Poems on ſundry occaſions. By James Woodhouſe, a journeyman ſhoe-maker. Dodſley. 4to. Price 3s.*

Mr. Woodhouſe is perhaps the moſt extraordinary real genius of the preſent age. Mr. Robert Dodſley, who in his retirement ſeems to take delight in doing good, has given us the following account of this ſurprizing poet.

James Woodhouſe is now a journeyman ſhoe-maker at the village of Rowley near Hales-Owen, about ſeven miles from Birmingham, and two from Mr. Shenſtone's; this gentleman upon peruſal of ſome of his pieces, grew extremely fond of him, lent him books, &c. and did him all the kind ſervices in his power; for, before this connection, all his knowledge conſiſted in what he had attained from magazines; and as to his education, he had but juſt ſufficient to enable him to read and write; being taken from ſchool at ſeven years old. As ſeveral of the poems contain high and deſerved compliments to Mr. Shenſtone, that gentleman would not on that account, ſuffer them to be publiſhed during his life. But ſince he is dead, Mr. Dodſley has, for the benefit of the honeſt bard, publiſhed them, and as the humble condition of the author may doubtleſs excite compaſſion in the minds of the humane, he has generouſly ſolicited donations to be left with himſelf and others for Mr. Woodhouſe, of whom he thus ſpeaks with regard to his preſent condition. "Since the death of Mr. Shenſtone, his reading is again circumſcribed to the magazines. He is about 28 years of age; has a wife and two or three ſmall children, whom he endeavours to maintain by great application to his buſineſs, and the teaching children to read and write; both of which occupations bring him in not more than eight ſhillings a week. He generally ſits at his work with a pen and ink by him, and when he has made a couplet he writes them down on his knee; ſo that he may not, thereby, neglect the duties of a good huſband and kind father; for the ſame reaſon his hours for reading are often borrowed from thoſe uſually allotted to ſleep." After this account, who would not be ſurprized to ſee the following excellent lines (which are in a poem called the Leaſowes; to Mr. Shenſtone.)

But not alike are fortune's favours found;
For he who plann'd this fair Heſperian ground,
Griev'd that one ſpark of genius ſhould expire,
With pleaſure ſtrung my weak diſcordant lyre;
Nor deafly heard me learning's want repine,
But, from his copious literary mine,
To eaſe my mourning muſe's diſcontent,
Full many a glowing volume frankly lent;
Nor ſpurn'd me ſcornful from his ſocial board,
With frugal bounty hoſpitably ſtor'd;
Where oft my ſoul in reverie has hung
On the ſmooth accents of his tuneful tongue;
While his bright fancy, borne on wing ſublime,
By judgment guided, rapidly would climb
The height of truth, with arguments refin'd,
To pureſt ſenſe a happy diction join'd:
Oft have I felt their intellectual force,
And quaff'd the ſtreams of genius at their ſource;
Ah! while theſe ſilken-pinion'd moments flew,
I, then, nor freedom's want, nor fortune's knew.

Although we have ſingled out theſe lines we do not mean by that to inſinuate that they are the beſt in the volume, becauſe they are far otherwiſe; and yet even from theſe any perſon may ſee the author is a *true* genius.

A

A CHRONOLOGICAL MEMOIR of OCCURRENCES.

FOREIGN AFFAIRS.

Peterſburg, March 6.

THEY have brought here from the mines in Siberia, 13,200 pounds weight of ſilver, and 990 pounds of gold, which has been collected this laſt year. The produce of the year 1762 was not ſo conſiderable; but the miners aſſure us, that the labours of the preſent year will be ſtill more advantageous.

Germany. The king of Pruſſia thinking the prince royal, his preſumptive heir (who was nineteen years of age in September laſt) has no further occaſion for a governor, has releaſed the baron de Borck from that office, and, as a mark of his ſatisfaction, granted him a penſion of 3000 crowns. The young prince's preceptor is likewiſe diſcharged, but his appointments are continued in lieu of a penſion.

Extract of a letter from Francfort, April 4.

"Yeſterday the arch-duke Joſeph was crown'd king of the Romans, the ſolemnity of the coronation was performed here with the uſual ceremonies, and with great dignity and order. The three eccleſiaſtical electors, and the electoral ambaſſadors, all in their mantles adorned with gold lace, went to the Dome between nine and ten in the morning. The emperor and the king of the Romans, preceded by a numerous train, repaired thither an hour after. Their majeſties were received at the gate by their electoral highneſſes, the trabans of Saxony being poſted as a guard there. The church was hung with rich tapeſtry, repreſenting the great actions of the emperors of the auguſt houſe of Auſtria. Before the gate of the choir was an alter richly adorned; on the right-hand of which was the emperor's throne; on the left, that of the elector of Mentz; and oppoſite, that of the king of the Romans. The ſeats of the two other electors, and for the plenipotentiaries, were ranged about in a half-circle. The coronation was performed by his electoral highneſs of Mentz, with the ceremonies preſcribed by the golden bull. Towards two in the afternoon, the emperor and the king of the Romans quitted the church, and, according to cuſtom, returned on foot, under a ſuperb canopy, to Romerberg; and, during the proceſſion, 300 pieces of cannon were fired. The new king was clothed with the ornaments of royalty, the crown upon his head, ſceptre in his hand, and antique ſlippers, covered with pearls, on his feet. Being arrived at the Hotel-de-ville, their majeſties ſat down to table, and were ſerved by the reſpective repreſentatives of the electors, and by the other great officers of the empire, each performing the functions of his poſt. At the end of the repaſt, they went to one of the windows of the great hall, to ſee the gold and ſilver medals thrown amongſt the people; and at ſeven in the evening they returned to their palace. This day the new king of the Romans received the compliments of an infinite number of perſons of diſtinction."

Florence, March 20. His royal highneſs the duke of York arrived here on Friday the 16th inſt. in good health: Lord Fordwich, and Sir Horace Mann, had been for two days towards the confines on the Bologna road, to wait for his royal highneſs, and had the honor to conduct him into the town. The deſire of his royal highneſs to paſs under the title of earl of Ulſter, deprived this government of ſhewing him thoſe public honours on his entering the town, that were intended.

Florence, March 31. His royal highneſs the duke of York intends to make a viſit to Leghorn on Tueſday, and to return hither at the end of the week.

PLANTATION NEWS.

Kingſton (Jamaica) Dec. 8.

By a private letter from the Black River, on the Muſquito-ſhore, dated Nov. 11. 1765, we learn, "That the Spaniards are gathering all the troops and others fit to bear arms, from all the provinces adjacent, under the command of Don Lewis Dies Navarro. A lieutenant-colonel arrived from Guatimala with a troop of dragoons, and other men in arms, and are rendezvouſed at Truxillo. We are juſt diſpatching a flag of truce to Truxillo, to enquire into the truth of this information, and have ordered all the Muſquito indians down here, and put ourſelves in arms to act with them, for the protection of this ſettlement."

Bridgetown, Barbadoes, Dec 22. By the Recovery brig, which arrived a few days ago from Newfoundland, we hear, that the fiſhery on that coaſt has been very ſucceſsful this ſeaſon; that upwards of 600 ſail of Britiſh, and 200 ſail of French veſſels were employed; that ſome bickerings happened between the Engliſh and French, the latter

of which inſiſted on an excluſive right of fiſhing on that part of the coaſt allotted to them by the treaty; which was denied by the Engliſh, who very juſtly told them, that though a right was given them to fiſh on that part of the coaſt, yet it did not preclude them from fiſhing there likewiſe. Commodore Greaves, who commands on that ſtation, ſent two frigates to keep them quiet. When the French ſailed for Europe, they left all their fiſhing boats, amounting to ſeveral hundreds, and a large quantity of ſalt, behind them; which being directly contrary to the treaty, the commodore ordered the whole to be deſtroyed, which was effectually done. They further add, that all the frigates and ſloops have been fully employed by the commodore, in taking draughts and ſoundings in the bays, &c. on the coaſt of Labrador, where it is thought even a more extenſive fiſhery than on the Newfoundland coaſt may be carried on.

L O N D O N.

Greenwich, April 1.

THIS morning a little after eight o'clock, their royal highneſſes prince William Henry, and prince Henry Frederic, attended by ſome perſons of diſtinction, came to the royal obſervatory at Greenwich, to be preſent at the obſervation of the great ſolar eclipſe, where they were received by the Rev. Mr. Profeſſor Bliſs, his majeſty's aſtronomer, who came from Oxford to Greenwich the preceding day. Their highneſſes behaved with the moſt remarkable condeſcenſion and affability; and in order to prevent any interruption that might otherwiſe have happened to the obſervation, were pleaſed to command, that all ceremony ſhould be ſuſpended. They took their ſtation on the leads near Mr. Bird, who had placed himſelf at one corner of the leads; Mr. Reeves the aſſiſtant obſerver, was at the other corner, as far as poſſible from Mr. Bird; and Mr. Profeſſor Bliſs was in the adjoining room, accompanied by Mr. Witchell, one of whoſe maps was preſented to their highneſſes by Mr. Profeſſor. Their royal highneſſes viewed the eclipſe with a fine reflecting teleſcope, which they brought with them: Mr. Bird and Mr. Reeves likewiſe made uſe of reflectors, but Mr. Bliſs obſerved it with a long refractor. The morning was extremely fine till a little before the eclipſe began, during which interval the ſun's diameter was meaſured with Dolland's micrometer (which had alſo been done ſeveral days before.) Unhappily the clouds began to gather ſoon after, which, however, did not prevent the beginning of the eclipſe being obſerved with great preciſion; the moon's diameter was likewiſe meaſured, and the quantity eclipſed obſerved as often as poſſible; but not long before the end of the eclipſe the clouds became ſo thick, that neither that, nor the ſun's tranſit over the meridian, could be obſerved: upon the account of this laſt circumſtance, it was judged proper to defer reducing the time of the obſervation till a more favourable opportunity; but by a compariſon of the clock with an obſervation which was made on Friday, it was concluded, that the eclipſe began about one minute 3-4ths later than Mr. Witchell's calculation made it, and that the quantity eclipſed fell ſhort of his by about one-tenth of a digit. This deviation of his numbers being very trifling when compared with what had been publiſhed by ſome other gentlemen, he had the honour of receiving their royal highneſſes approbation, and the compliments of the noble ſpectators, for his care and circumſpection in making that computation.

The following account of the late eclipſe of the ſun, as it was obſerved in Liverpool by Mr. Ferguſon, and ſeveral gentlemen who were then with him.

A clock was adjuſted to mean or equal time, by ſeveral obſervations of the ſun and ſtars taken before-hand; and the time ſhewn by the clock was verified by an obſervation of the ſun, taken on Sunday morning before the eclipſe began.

The ſky proved very favourable, and the eclipſe was obſerved to begin 59 minutes after eight o'clock; the moon's contact with the ſun being viſible to a ſecond of time. The ſun's image was taken on a paper paſted on a board, and placed behind a reflecting teleſcope; which image was included in a circle of four inches diameter; the diameter being divided into 12 equal parts or digits, and each digit into four equl parts; ſo that the quantity of the eclipſe at any time from beginning to end, could be truly meaſured. Between the beginning and middle of the eclipſe, ſeveral inequalities were viſible in the moon's eaſtern limb on the ſun, by means of the teleſcope; and very often ſeveral little bright ſpots in the ſun's lower limb could be perceived in the eclipſed part of the ſun's lower limb, in theſe dents or inequalities, juſt before the lower cuſp or horn of the eclipſed part; but they generally vaniſhed in an inſtant, except one, larger than the reſt, which was viſible for about two ſeconds of time, as eſtimated by Mr. Ferguſon.

ſon. At the time of greateſt obſcuration, which was about 21 minutes after 10, the ſun was 10½ digits eclipſed. At 40 min. 30 ſec. after ten, the ſhadow of a plumb-line on the ſun's image, ſhewed the cuſps of the eclipſe to be in a line perpendicular to the horizon; and conſequently the apparent altitudes of the centres of the ſun and moon were then equal. From that time to the end of the eclipſe, the moon's weſtern limb was carefully obſerved on the ſun, but no inequalities could be perceived in it, nor were there any tremulous ſpecks of the ſun's edge ſeen in the eclipſed part, about either of the cuſps. The eclipſe ended 50 min. 45 ſec. after 11 o'clock, according to mean or equal time; ſo that the whole duration thereof was two hours 51 min. 45 ſecond.

The apparent, or ſolar time, of the beginning of the eclipſe was at 55 min. 15 ſec. after eight o'clock; and the apparent time of ending was at 47 min. after 11.

March 30. This day came on in the ſenate-houſe at Cambridge, the election of an high ſteward for that univerſity, when there appeared among the black hoods,

For the Earl of Hardwicke,

Placet	———	103
Non Placet	——	101

Amongſt the white hoods, the proctors accounts were different:

Mr. Longmire's was,

Placet for the Earl of Hardwicke		108
Non Placet	———	107

Mr. Foſter's was,

Non Placet	———	108
Placet	———	107

So that Mr. Longmire's was one in favour of Lord Hardwicke, and Mr. Foſter's was one againſt his Lordſhip. Upon this diſagreement of the two proctors, the ſenior proctor, Mr. Longmire, (who had voted for the grace, in favour of lord Hardwicke) propoſed to the vice-chancellor, to take the votes of that houſe over again; to which the junior proctor, Mr. Foſter, (who had voted againſt lord Hardwicke) refuſed to agree, though directed, and admoniſhed ſo to do, by the vice chancellor. The vice-chancellor then ordered a public notary to make an act of what each proctor declared upon that occaſion; and a great confuſion ariſing, he in the uſual form adjourned the ſenate *ſine die*.

The following is an authentic copy of the above-mentioned notarial act.

Cambridge, March 30, 1764.

At a congregation in the ſenate-houſe in the univerſity to elect a high ſteward, in the afternoon, after a ſecond reading, the grace in the black-hood, and white-hood houſes, Mr. Vice-Chandler aſked the ſenior proctor if he could make a declaration of the election of an high ſteward; the ſenior proctor anſwered, he could not without a ſecond ſcrutiny, which he way ready to make. Mr. Vice Chancellor then aſked the junior proctor if he could make a declaration; the junior proctor anſwered, he could not, without his brother proctor. Then the vice-chancellor aſked the junior proctor, if he would make a ſecond ſcrutiny: this the junior proctor refuſed, both before and after he was admoniſhed by the vice chancellor to do ſo.

In the preſence of me,

THOMAS BENNET, notary public.

April 5. His majeſty went to the houſe of peers, and gave his royal aſſent to, the bill for granting a certain ſum out of the ſinking fund for the year 1764. For granting certain duties on goods in the Britiſh colonies, and to make perpetual an act for encouraging the trade to the ſugar colonies. For altering the duties on beaver-ſkins, and for granting other duties in lieu thereof. To continue the laws for better regulating pilots from Dover or Deal into the river Thames or Medway. To continue the laws for encouraging the manufacture of ſail-cloth. For more eaſy diſcharge of recognizances eſtreated in the court of exchequer. To eſtabliſh a nightly watch, and for better regulating and employing the poor in the pariſh of St. Clement Danes. For better regulating buildings, and to prevent accidents that may happen by fires within the bills of mortality, and elſewhere. And to ſeveral bills to repair roads, and incloſe and divide lands, &c.

9. This morning ſeveral thouſand journeymen weavers preſented a petition to his majeſty, repreſenting the miſerable condition themſelves and families are reduced to, by the clandeſtine importation of French ſilks.

11. This evening the ballot was cloſed for the election of directors of the Eaſt India company for the year enſuing: and twenty ſcrutineers were appointed, ten on each ſide, who were to make their report to a general court at the Eaſt India houſe at ſix o'clock yeſterday evening. A very numerous body of proprietors were accordingly aſſembled; but it was near eight before the ſcrutineers made their report, which was as follows:

William Barwell, Eſq;	———	1157
Chriſtopher Barron, Eſq;	——	1147
Henry Crab Boulton, Eſq;	——	1094
John Boyd, Eſq;	———	1175
† Robert Burrow, Eſq;	———	630
Charles Chambers, Eſq;	———	1152

* George

*	George Cumming, Eſq;	604
	Charles Cutts, Eſq;	1117
	George Dudley, Eſq;	1105
†	Peter Ducane, jun. Eſq;	614
	Henry Hadley, Eſq;	1163
	John Harriſon, Eſq;	1174
	John Manſhip, Eſq;	1131
†	Frederick Pigou, Eſq;	634
	John Purling, Eſq;	1159
*	John Roberts, Eſq	606
†	Giles Rooke, Eſq;	618
*	Thomas Rous, Eſq;	642
*	Henry Savage, Eſq;	620
†	William Snell, Eſq;	637
†	Richard Smith, Eſq;	604
†	Lawrence Sulivan, Eſq;	604
†	William Thornton, Eſq;	614
	William Webber, Eſq;	1157

Of the above, the twelve without any mark were in both liſts. The eight mark-thus †, were in the houſe liſt, and the four marked *, were in the proprietors liſt.

The delay of the ſcrutineers in making their report, was occaſioned by an examination into the validity of the ballot of Mrs. Drummond, lady to the archbiſhop of York, viz. whether ſhe could be conſidered as a ſtockholder in her own right; to determine which, the ſcrutineers found it neceſſary to ſend a deputation from their body, to his grace and Mrs. Drummond, to make the proper enquiries; and the company's charter was likewiſe referred to. The reſult was, that this lady's ballot was not admitted by the ſcrutineers.

Upon this very nice circumſtance did the certainty of Mr. Sulivan's being elected into the direction depend. For it is remarkable, that the numbers of three gentlemen were equal, being 604 for each; and if Mrs. Drummond's ballot had been admitted (which was for the proprietors liſt) it would have given Mr. Cummings 605, and put Mr. Cruttenden upon an equality with Mr. Smith and Mr. Sulivan. Mr. Cummings would conſequently have been elected by a clear majority, and it muſt have been determined by caſting lots (agreeable to the charter) which two out of Meſſrs. Smith, Sulivan, and Cruttenden, ſhould come into the direction.

A few days previous to this election, which was conteſted with great warmth, the following account of the ſituation of affairs in India was repeatedly publiſhed in all the papers.

Eaſt India houſe the 4th of April, 1764.

By the company's ſhip Royal George, which arrived at Spithead from Bengal on the firſt inſtant, the court of directors have received letters from that preſidency, to the following purport: that the diſputes between the company's ſervants there, and the reigning nabob, Coſſim Aly Cawn, had been productive of ſuch animoſities and jealouſies on the part of the latter, that it was judged highly neceſſary to uſe every means to allay them; for this purpoſe Meſſ. Amyatt and Hay, two gentlemen of the council, were deputed to wait upon the nabob, with inſtructions to endeavour to adjuſt the differences in an amicable manner. They accordingly arrived at Mongheer, the place of his reſidence, on the 12th of May, and had many conferences with him, in which he evidently ſhewed a great averſeneſs to an accommodation upon the terms offered to him. About this time, a ſupply of 500 ſtands of arms, going to Patna, was ſtopped by the nabob's officers, and other acts of hoſtilities were committed; and affairs being come to an extremity, a war with Coſſim Aly was unavoidable. Meſſ. Amyatt and Hay were recalled, and meaſures were taken at the preſidency, to carry it on in the moſt effectual manner. Mr. Amyatt having taken leave of the nabob the 24th of June, and received the uſual paſſports, he ſet out in boats for Calcutta, accompanied with Meſſ. Amphlett, Wollaſton, and Hutchinſon; lieutenants Jones, Gordon, and Cooper; and doctor Crooke (Meſſ. Hay and Gulſton remaining with the nabob as hoſtages.) As the boats were paſſing the city of Moorſhedabad, they were attacked on the 3d of July by a number of troops, aſſembled for that purpoſe, on both ſides the river, and ſome of the gentlemen were killed in the boats. Mr. Amyatt immediately landed with a few Seapoys, which he forbid to fire, and endeavoured to make the enemy's troops underſtand that he was furniſhed with the nabob's paſſports, and had no deſign of committing any hoſtilities; but the enemy's horſe advancing, ſome of the Seapoys fired, notwithſtanding Mr. Amyatt's orders; and a general confuſion enſuing, that gentleman, and moſt of the ſmall party who were with him, were cut to pieces.

By the ſaid letters it further appears, that Mr. Ellis and his council at Patna having, with the approbation of capt. Carſtairs, agreed to attack that city early in the morning of the 25th of June, it was accordingly executed and carried; that they were in entire poſſeſſion of the city for four hours, the mooriſh governor and moſt of his people having fled as far as Futwa; that he there came to a reſolution to return and attempt to regain the city, and having got in at the water-ſide gate of the fort, he ſucceeded in diſ-

diſpoſſeſſing our troops, owing to the Seapoys and Europeans being moſtly diſperſed in plundering. That upon their retiring into the factory, on account of the diſpiritedneſs of the men, and a great diſſertion among the Seapoys, it was found impracticable to make any ſtand there; and a reſolution was therefore taken to proceed to Sujah Dowla's country; that they accordingly croſſed the river the 26th in the evening, and met with no obſtruction until they paſſed Churpa; that then they were attacked on the 30th by the Phouſdar, with about 2000 men, whom they eaſily routed; but he being that evening joined from Budgepore with four or five hundred Seapoys, and five or ſix field pieces, he attacked the party on the next evening, the firſt of July, and entirely routed them, the Europeans having quitted their ranks at the firſt onſet; that in the whole there were about fifty Europeans killed, and about eight or nine officers, amongſt the laſt captain Carſtairs, who was killed by a cannon-ball in the morning of the firſt; that on the ſecond Mr. Ellis, with the officers and private men, were taken priſoners, and by the laſt advices were all at Mongheer, excepting capt. Wilſon, Enſigns Mackay and Amſtrong, Mr. Anderſon, ſurgeon, and Mr. Peter Campbell, who then remained priſoners at Patna.

Upon theſe and other acts of hoſtility againſt ſeveral of the company's ſettlements committed by Coſſim Aly, it was determined to declare war againſt him, and to reſtore the former nabob, Meer Jaffier, to the Subahſhip, upon his entering into a new treaty with the company. War was according declared, and an advantageous treaty was concluded, the moſt material articles whereof are a confirmation of his former treaty, and alſo of the provinces of Burdwan, Nidnapoor, and Chittagong, granted by the late nabob Coſſim Ally, engaging to give thirty lacks of rupees to defray the expences and loſs accruing to the company from the war, and engaging alſo to reimburſe the amount of private perſons loſſes.

Meer Jaffier ſet out a few days after to join the army under major Adams, which was then on its march towards Moorſhedabad.

This account then gives a part of the ſubſtance of ſome letters from major Adams: but on the 21ſt of this month, and not before, a letter from major Adams containing a full account of his military operations was publiſhed in the London Gazette.

16. Wedneſday evening laſt, the ſociety for the encouragement of arts, &c. adjudged the firſt premium of 50 guineas, for the beſt landſcape, to Mr. Barratt, a celebrated painter from Dublin; the ſecond of 25, to Mr. Bond, of Birmingham; and the third of 15 to Mr. Steuart, of London. The two firſt landſcapes were allowed to poſſeſs an uncommon ſhare of merit, but the ſuperiority evidently appearing on Mr. Barratt's ſide, he was unanimouſly honoured with the firſt premium, notwithſtanding Mr. Bond gave indubitable proof of extraordinary abilities.

19. His majeſty went to the houſe of peers, and being ſeated on the throne, made the following moſt gracious ſpeech, and gave the royal aſſent to ſeveral bills, after which both houſe were prorogued.

My lords and gentlemen,

I cannot put an end to this ſeſſion of parliament, without returning you my thanks for the prudent and ſalutary meaſures which you have taken to extend the commerce, and ſecure the happineſs of my kingdoms.

The aſſurances which I have received of the pacifick diſpoſition of the ſeveral powers with whom we were lately at war, and of their reſolution to adhere inviolably to the terms of the late treaty, promiſe the continuance of peace abroad; and the firm and temperate exertion of your authority, joined to the conſtitutional and public ſpirited conduct which you have manifeſted on every occaſion during the preſent ſeſſion, will, I truſt, eſtabliſh at home due obedience to the laws, reverence to the legiſlator, and domeſtic union.

Gentlemen of the houſe of commons,

I thank you for the ſupplies which you have ſo chearfully and unanimouſly granted. The ample proviſion you have made for the ſeveral ſervices recommended to you, and eſpecially for maintaining my fleet in a reſpectable ſtate, will, I am confident, preſerve to this nation its proper weight and influence, and give ſtrength and ſecurity to all my dominions.

The wiſe regulations which have been eſtabliſhed to augment the public revenues, to unite the intereſts of the moſt diſtant poſſeſſions of my crown, and to encourage and ſecure their commerce with Great Britain, call for my hearty approbation.

Your regard to public credit, in diſcharging a part of the heavy debt contracted and unprovided for during the late war, without impoſing on this kingdom the burthen of new taxes, is particularly pleaſing to me, from the tender concern which I feel for my people.

My lords and gentlemen,

It is the proper employment of this ſeaſon of tranquility, to conſider of the moſt effectual means for perfecting thoſe works of peace,

peace, and plans of public utility, which have been ſo wiſely and happily begun.

I recommend theſe important objects to your conſideration during the receſs. You may depend upon my conſtant endeavours for the ſucceſs of theſe good purpoſes, as I ſhall ever eſteem it my trueſt glory, to employ that power with which the conſtitution hath entruſted me, in promoting your real intereſts, and laſting happineſs.

20. The ſea officers ſhares of the laſt dividend of the Havannah prize-money, which was 60,000l. were as under:

		l.	*s.*	*d.*
1	Admiral	20,000	0	0
1	Commodore —	4,000	0	0
42	Captains, each	321	8	6
183	Lieutenants, each	24	11	2
365	Warr. officers, each	12	6	6
1303	Petty ditto —	3	9	0
12591	Able	0	14	3

24. This day a chapter of the moſt noble order of the garter was held at St. James's, to fill up the two vacancies of that order; when his majeſty was pleaſed to inveſt the reigning duke of Mecklenburgh Strelitz, eldeſt brother to the queen, and the earl of Halifax, one of his majeſty's principal ſecretaries of ſtate.

Certain accounts from Paris ſay, that the marchioneſs de Pompadour died at Verſailles on the 14th inſt. after a tedious illneſs.

25. In a letter from Warſaw, it is denied in a manner as if the report had given offence, that magnificent preſents, of very great value, were lately made to count Poniatowſky, by the empreſs of Ruſſia. It is acknowledged, however, that a perfect good underſtanding ſubſiſts between the court of Peterſburgh and this count, to whom the king of Pruſſia, on his part, has lately ſent the following letter:

"My lord,

"I was much pleaſed with the letter I received from you, and with your obliging anſwers to the queſtions which M. Benoit, my reſident, aſked you in my name. I ſhall ever retain a proper ſenſe thereof; of which I ſhall give you proofs in encreaſing your party by facilitating the project, the accompliſhment of which will give me great pleaſure. I take a ſincere concern in it from a perſonal regard for you; and ſhall be moſt deſirous to give you convincing proofs of it on every occaſion that may preſent itſelf relative to this affair, being your's affectionately,

FREDERICK."

25. This day lord Clive received the honour of knighthood of the honourable order of the Bath.

The ſtate of the national debt, as it ſtood on the 5th of January laſt (being Chriſtmas day old ſtile) amounts to 129,586,789l. 10s. ½. and the annual intereſt or other charges attending the ſame is 4,688,177l. 11s.

In the courſe of the laſt ſeſſions of parliament, 175 bills received the royal aſſent, which, conſidering the ſhort continuance thereof (the Houſe of Commons ſitting no more than 86 days for the diſpatch of public buſineſs) is more than has been known for ſeveral years.

B——KR——TS.

March 31. Mary Cleaveland, late of Wapping, widow and ſhip-chandler. — Edward Corfield, of Hughley in the county of Salop, maltſter. — Eleanor Hiſcock, widow, and Ann Still, ſpinſter, both of the Devizes, ſhopkeepers. — Benjamin Robinſon, of Thames-ſtreet, London, ſlopſeller.

April 3. George Laidler the younger, of Buſy Cottage in Northumberland, Manufacturer of iron and ſteel.

7. Thomas Maine, of London, merchant. — David Jones, late of Cock hill, Ratcliffe-croſs, Middleſex, tobacconiſt. — James Lloyd Harris, late of Kington, Herefordſhire, ſcrivener.

10. Robert Friend, late of Tufton ſtreet, Weſtminſter, carpenter. — John Martin Willett, now or late of London, merchant, — Joſeph Atkinſon, late of the Strand, Weſminſter, goldſmith. — Lewis Bradley, the elder, of Wootton Wawen, Warwickſhire, dealer and chapman. — William Gordan, late of Liverpool, merchant. — John Beck, of Newgate-ſtreet, London, haberdaſher. — Mary Harry, now or late of the borough of Truro in Cornwall, widow, inn-keeper.

14. Charles Henry Thalbitzer, of London, merchant.

17. John Toler, of Threadneedle-ſtreet, London, merchant. — John David Ziegel, of London, merchant. — William Cooper, of Eaſtcheap, London, merchant. — Thomas Norton, now or late of Wakefield in the county of York, cloth-merchant. — Iſaac Akeroyd, late of Halifax, Yorkſhire, ſhalloon-maker. — William Smith, of Wyre Piddle, Worceſterſhire, miller.

21. Gabriel Bradley, now or late of Stourbridge, Worceſterſhire, ironmonger. — Richard Jackſon, of London, merchant. — William Williams, of Briſtol, hoſier. — Sturmee Maullin, of Bewdley in Worceſterſhire, cabinet-maker.

Births, Marriages, Preferments, &c. in our next.

Engraved for the General Magazine, *for W. Owen, at Temple Bar.*

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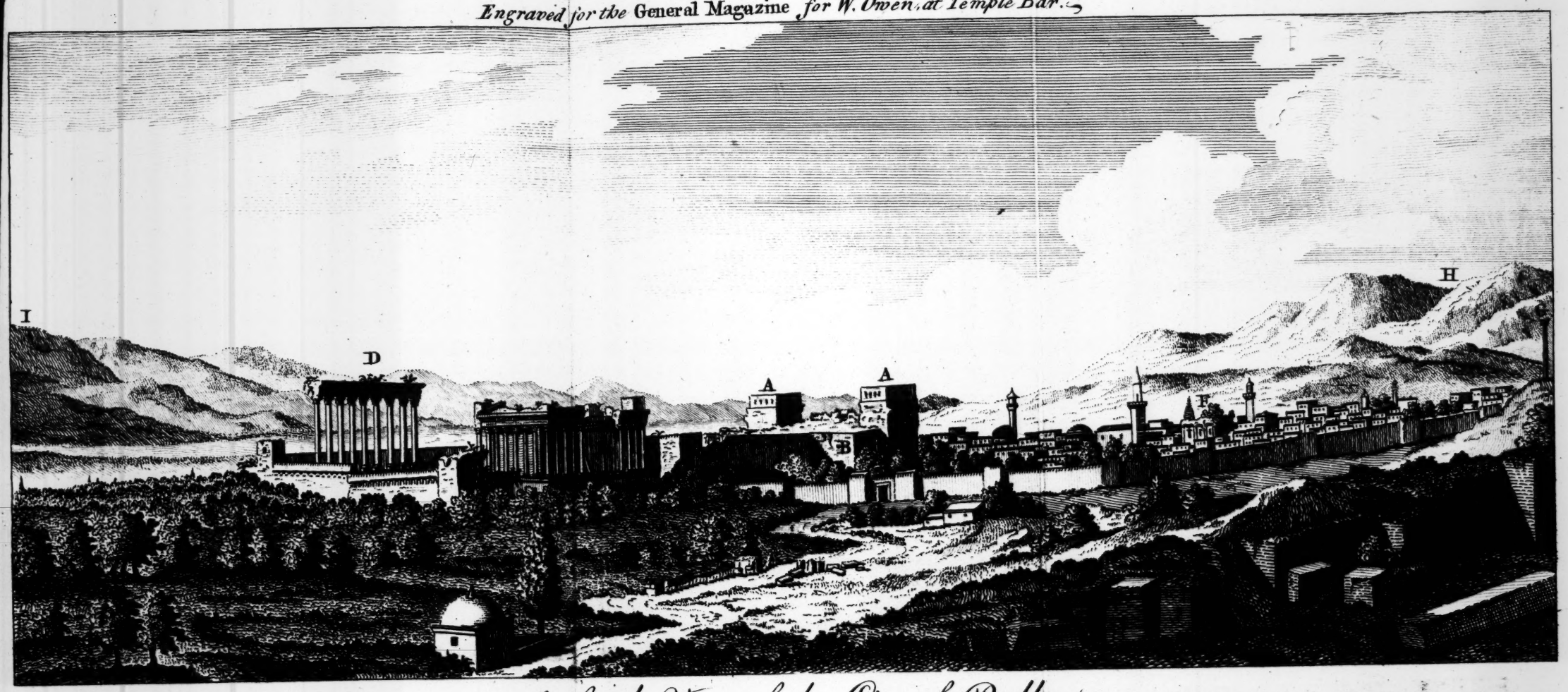
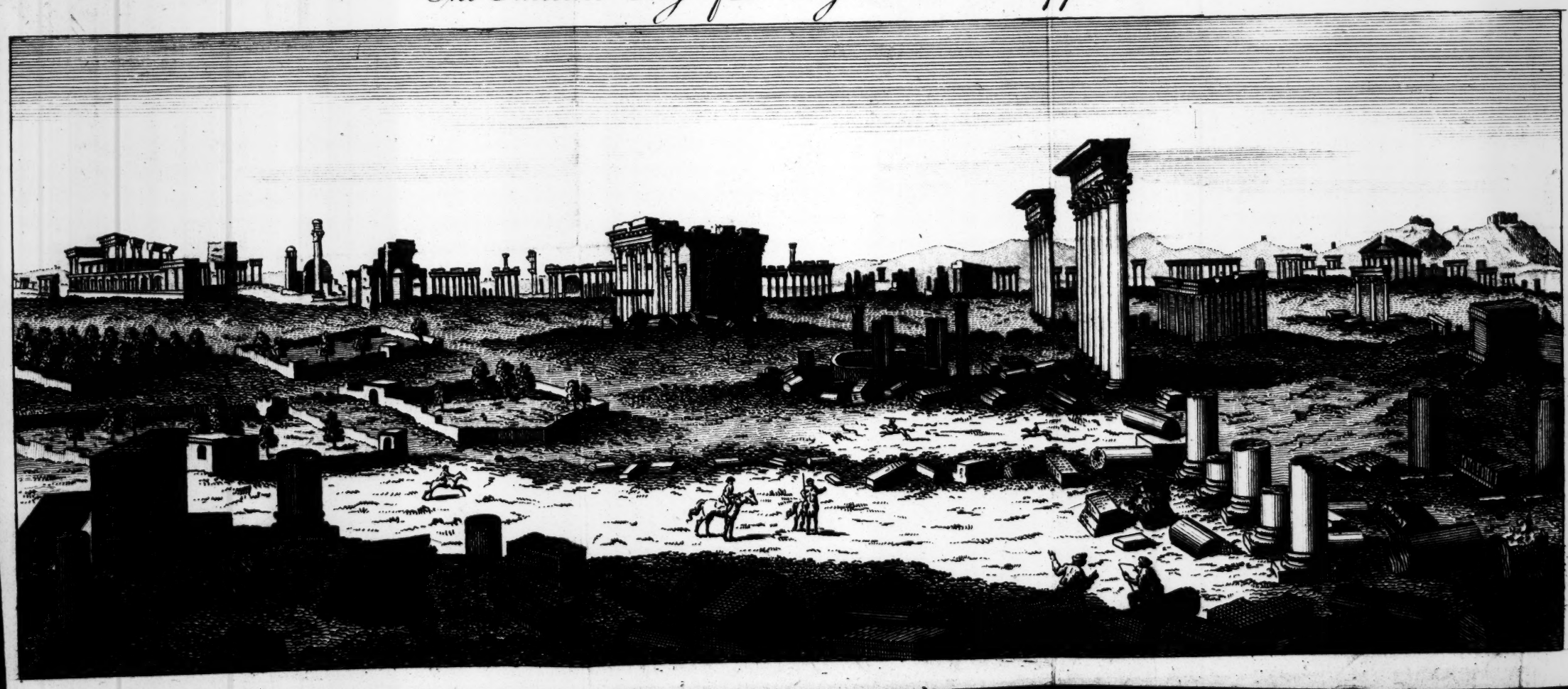
Engraved for the General Magazine *for W. Owen, at Temple Bar.*



A South View of the City of Balbec.

The Antient City of Palmyra as it now appears.



The GENERAL MAGAZINE,

For *MAY*, 1764.

To the Proprietors of the General Magazine.

I Have been ſeveral days feeding my eyes with thoſe delicious remains of ancient architecture, the ruins of PALMYRA, with which thoſe very ingenious gentlemen Mr. DAWKINS and Mr. WOOD, who made a voyage into ASIA on purpoſe, with the much to be lamented Mr. BOUVERIE, have ſo greatly entertained the public. I am almoſt perſuaded that LONGINUS himſelf muſt have been the architect of the temple of the ſun. There is ſomething ſo ſublime in that view of the grand entrance, and the noble perſpective behind it; and ſo analogous to his capacious conceptions of greatneſs in poetical compoſitions; that many a one, with a fancy leſs warm than mine, joined to a temper ſomewhat more dogmatical, would pronounce it abſolutely to be the work of that great genius, and endeavour to ſupport his opinion, like a modern controverſialiſt, with a hundred notable conjectures tacked together with ſhreds of ancient hiſtory. I muſt own I was greatly ſurprized that among this prodigious heap of magnificent ruins, there ſhould be found only four IONIC pillars, and all the reſt ſhould be of the CORINTHIAN order. The deteſtation the PALMYRENES bore to the ROMANS might be a ſtrong reaſon there ſhould be none of the TUSCAN; but why one GRECIAN order ſhould be ſo little uſed, and the other totally neglected, ſeems not ſo eaſily to be accounted for, eſpecially too when the Ionic was more in uſe, through Aſia Minor and the neighbouring countries to Palmyra, than both the other two joined together. 'Tis true, the ſimplicity of the Doric would have ill ſuited the magnificent ſtructures built in honour of the greater cœleſtial Gods, but might nevertheleſs, with the utmoſt propriety and taſte, have been applied in temples of the inferior deities, and more particularly too of thoſe who preſided over the concerns of the innocent ſhepherd and laborious huſbandman. Here not only the plain ſubſtantial Column of the Doric, the canon of whoſe order was aſcertained, not by the lofty cedar, but by ſturdy trees of a more common growth, was the only *proper* ſupport for the temple of Pan or Sylvanus, but the ornaments generally made uſe of in that order were ſuch too as would be expected naturally in buildings of that kind at the firſt inſtitution of this rural religion; namely, the heads and horns of animals offered up in their ſacrifices. The want of this ſpecies of architecture made me ſuſpect, that the ruins which now remain were built at a time when an unbounded luxury had over-run the ſtate, and almoſt extinguiſhed the natural taſte for

truth and propriety. The great critic just mentioned, has a most beautiful observation, in his *Treatise upon the Sublime*, concerning the effect which immoderate wealth has both upon private families and nations, and the speedy progress it makes to obliterate in the human soul, by the luxury accompanying it, that noble and natural regard for every species of virtue, which the benevolent Author of our Being has originally implanted in us. "I cannot conceive, (says Longinus) how it can happen otherwise, but that we, who are so doatingly fond of immense riches, or, to speak more justly, who idolize them, should receive into our souls those evils which are congenial with them. For profusion very closely follows wealth, or, as we may say, accompanies it; and the latter having opened the gates both of cities and private families, they enter in and dwell together: where having settled for some time they make their nests (as the wise observe) and presently endeavouring to propagate their kind, they beget *Pride* and *Luxury*, which are no spurious issues, but their true and legitimate offspring. Whoever permit these children of wealth to come to maturity within them, they soon bring forth those implacable tyrants in their souls, *Contumely*, *Injustice*, and *Impudence*."* Now, history will inform us, that in all empires a similar depravity of taste for arts and sciences and natural beauty, has ever attended a national corruption of morals. In the glorious and virtuous part of the Roman republic under the consuls, what admirable edifices were erected for public use, such as temples for the worship of the gods, Senate-houses, granaries and aquæducts! In the sink of vice under the emperors, we hear of expensive mausoleums, immense circusses, splendid amphitheatres, stately columns dedicated to monsters who disgraced their species, and many other tasteless wonders built for the gratification of human vanity. From hence I am inclinable to think the ruins now before us were erected in the age immediately preceding, or in that of ZENOBIA herself; when the splendid Corinthian only could satisfy the luxury of the times, which had eradicated that taste for propriety as otherwise would have been occasionally delighted with the milder charms of the Doric order. Nevertheless considering a true taste for architecture must have preceded this indiscriminate magnificence, and that many of these buildings too are not only instances of great science, but likewise often applied with great propriety (for instance, among others, the great temple) I could not help falling into the same kind of reflection as Sulpicius makes, in his letter to Cicero,† on

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* Ου δη εχω λογιζομενος ευρειν ως οιον, &c. LONGIN. de Sublim. Page 248. Edit. *Pearce.*

† The humane Sulpicius thus apostrophizes himself, after the reflection. Hem! nos homunculi indignamur, si quis nostrum interiit, aut occisus est, quorum vita brevior esse debet, cum uno loco tot oppidum cadavera projecta jaceant? *Visne tu te, Servi, cohibere, et meminisse, hominem te esse natum?* Epist. lib. iv. epist. 5.

on ſeeing, in his voyage from Aſia, the ruins of Ægina, Megara, the Piræeus, and Corinth. *Shall ſuch inconſiderable creatures as myſelf* (ſaid I) *repine at any little private loſs, when at one view I behold the aſtoniſhing magnificence of ſo many hundred families, and the vaſt public ſtructures of a mighty kingdom, all in ruins before me?*

Of the Ruins of BALBEC.

THE valley of Bocat, in which Balbec is ſituated, might be rendered one of the richeſt and moſt beautiful ſpots in Siria; for it is more fertile than the celebrated vale of Damaſcus, and better watered than the rich plains of Eſdraelon and Rama. In its preſent neglected ſtate it produces corn, and ſome good grapes; but though ſhade is an eſſential article of oriental luxury, it has but few plantations of trees, the inhabitants being diſcouraged from labours, which promiſe ſuch diſtant and precarious enjoyment, in a country where even the fruits of their induſtry are uncertain. Thus in Paleſtine we have often ſeen the huſbandman ſowing, accompanied by an armed friend, to prevent his being robbed of the ſeed.

The plain extends in length from Balbec almoſt to the ſea, and its breadth from Libanus to Anti-Libanus appears to be in few places leſs than two leagues, or more than four. The rivers by which it is watered are the Litane and the Bardouni: the firſt riſes from Anti-Libanus a little to the north of Balbec, and receives great increaſe from a fine ſpring cloſe by the city walls; the laſt riſes from the foot of Libanus, and joins the Litane in the plain, about an hour from a village called Barillas. Theſe ſtreams, augmented by ſeveral conſtant rills from the melting ſnows of Libanus, which the leaſt management might improve to all the purpoſes either of agriculture or pleaſure, form the Caſimiah, and under that name enter the ſea near Tyre.

Balbec is pleaſantly ſituated upon a riſing ground near the north-eaſt extremity of this plain, between Tripoly of Syria and Damaſcus, and about 16 hours diſtant from each. We may with certainty conclude, that this was the Heliopolis of Cœloſyria, ſometimes called the Heliopolis of Phænicia. It has now about 5000 inhabitants, a few of which are Greek and Maronite Chriſtians, and there are ſome Jews; but the people are at preſent poor, without trade and manufactures. The ancient female beauty and proſtitution of the women in this neighbourhood ſeem to have declined together, and the modern ladies of Balbec have the character of being more chaſte and leſs fair.

When we compare the ruins of Balbec with thoſe of many ancient cities in Greece, Egypt, and other parts of Aſia, we cannot help thinking them the remains of the boldeſt plan that appears to have been ever attempted in architecture.

In taking a view of this city from the ſouth, we ſee the preſent town encompaſſed with its wall, and at the eaſt end the moſt conſiderable

ruins of the ancient Heliopolis, particularly the remains of its magnificent temple, which are moſtly ſurrounded by a Turkiſh fortification. The plate gives an exact view of the city as it appears in perſpective, where

A Is the portico of the great temple, on the ruins of which are Turkiſh towers.
B The ſouth-weſt wall of the hexagonal court.
C The ſouth-weſt wall of the quadrangular court.
D Nine Corinthian columns of the periſtyle of the great temple.
E The moſt entire temple.
F The circular temple.
G A Doric column.
H Part of Anti-Libanus.
I The Part of Mount Libanus.

The portico which formed the grand front of the temple is ſo noble, that no ornaments ſeem wanting to render it complete; but it is diſfigured by the two Turkiſh towers built on its ruins. Behind it the hexagonal court, into which the portico leads, is adorned with the moſt magnificent buildings, now in ruins; but enough is ſtill left to give an idea of their ancient grandeur. The walls are adorned with pilaſters of the Corinthian order, with ſtatues for niches; the doors are finely ornamented, and the entablature which ſurrounds the building above the pilaſters is richly adorned with feſtoons: but the colonade which ſurrounded theſe edifices is deſtroyed, ſcarcely any thing remaining but the pedeſtals; and the whole court is covered with broken columns, capitals, and other parts of the buildings.

This leads into a quadrangular court, in which are likewiſe remains of magnificent buildings much in the ſame taſte. The portico was crowned with an Attic courſe, which was alſo carried through the two courts, and ſeems to have been ornamented with ſtatues.

We now come to the great temple, the approach to which was through the foregoing portico and courts. Little more of this edifice remains than nine lofty columns ſupporting their entablature. It is remarkable that the ſhafts of theſe columns conſiſts of three pieces moſt exactly joined together without cement, which is uſed in no part of theſe buildings; they being only ſtrengthened with iron pins received into a ſocket worked in each ſtone. Moſt of the baſes have two ſuch ſockets, one ſquare and another circular, correſponding to two others of the ſame ſhape and dimenſions in the under part of the ſhaft. On meaſuring ſome of the largeſt of thoſe that were circular, it was found that the iron pin which they received muſt have been a foot long, and above a foot in diameter. By the ſockets in all the fallen fragments of this temple, it appears that each ſtone had probably been faſtened in this manner. How much this method contributed to the ſtrength of the building is remarkably ſeen in the moſt entire temple, where a column has fallen againſt the wall of the cell with ſuch violence, as to beat in the

the ſtone it fell againſt, and break part of the ſhaft, while the joinings of the ſame ſhaft have not been in the leaſt opened by the ſhock.

The moſt entire temple is irregularly placed with reſpect to the former, and is alſo built upon a much lower horizontal plan. It has a periſtyle of eight columns in front, and fifteen in flank, which ſtill continue to ſupport their entablature, notwithſtanding ſeveral unſucceſsful attempts of the Turks to deſtroy them, in order to get at the iron employed in ſtrengthening this noble building. The arch of the portico is divided into compartments by the richeſt mouldings and carved work, cut in the ſolid ſtone. Theſe compartments are in an alternate ſucceſſion of one hexagon and four rhombs, incloſing figures and heads in alto relievo. The rhomboid pannels contained heads of gods, heroes, and emperors; the hexagons alſo contain the heads of the ſame ſubjects, and ſometimes entire figures relating to the ancient mythology, as Leda and the ſwan, Ganymede riding on the back of an eagle, a half-length of Diana, &c. On the inſide of this temple a row of fluted Corinthian columns reach to the top of the building, ſupporting a rich entablature. Between each column is a niche finely ornamented, and above each niche a tabernacle or opening anſwering to it, ſupported by ſmall columns. The roof is fallen down, and out of the ruins of the entablature grow many ſhrubs.

At ſome diſtance to the weſt of theſe ſuperb remains of antiquity, is a magnificent circular temple. The order of this ſtructure without is Corinthian, and within both Corinthian and Ionic; but the ſhafts of all the columns are of one piece. The lower or Ionic ſtory is converted into a Greek church, and for that purpoſe is ſeparated from the higher or Corinthian ſtory. We have given a view of this edifice in its preſent ſtate, with the Turkiſh houſes and modern additions erected againſt it; and by this view the reader will be better able to form an idea of this once elegant ſtructure, than by any verbal deſcription.

On the ſouth-weſt part of the city, where the walls incloſe a ſmall part of the foot of Anti-Libanus, is a ſingle Doric column, of conſiderable height; but nothing in its ſize, proportions, or workmanſhip, is ſo remarkable as a little baſon on the top of its capital, which has a communication with a ſemicircular channel cut longitudinally down the ſide of the ſhaft, and five or ſix inches deep. It is ſaid that water was formerly conveyed from the baſon by this channel; but how the baſon was ſupplied, our author could not learn.

The ſmall part of the city at preſent inhabited is near the circular temple, and to the ſouth and ſouth-weſt of it. In this compaſs there are ſeveral minarets, or Turkiſh ſteeples. Inſtead of bells, which are not uſed in Turky, a perſon is employed to call the people to prayers, from the balcony near the top of the minaret, at the five ſtated times appointed every 24 hours for divine worſhip.

The

The city walls, like thoſe of moſt of the other ancient cities of Aſia, ſeem the confuſed patch-work of different ages. The pieces of capitals, broken entablatures, and in ſome places reſerved Greek inſcriptions, to be ſeen in going round them, ſhew that their laſt repairs were made after the decline of taſte, with ſuch materials as lay neareſt at hand. The city gates in general correſpond with what has been ſaid of the walls; but that on the north ſide preſents the ruins of a large ſubaſſement with pedeſtals and baſes for four columns, in a taſte of magnificence and antiquity much ſuperior to that of the other gates.

Near the city walls is a quarry of free-ſtone, from which probably the immenſe ſtones employed in the ſubaſſement of the great temple were taken, while the more ornamented parts of thoſe buildings were ſupplied from a quarry of coarſe white marble weſt of the city, and at a greater diſtance. In the firſt quarry there are ſtill remaining ſome vaſt ſtones cut and ſhaped for uſe. One of the ſtones thus ſhaped, but not entirely detached from the quarry at the bottom, we found to be 70 feet long, 14 broad, and 14 feet five inches deep. This ſtone, according to the dimenſions, contains 14,128 cubic feet, and, were it Portland ſtone, ſhould weigh about 2,270,000 pounds avoirdupoiſe, or about 1135 tons.

The inhabitants of this country, both Mahometans, Jews, and Chriſtians, all confidently believe that Solomon built both Palmyra and Balbec. Indeed, the ruins of both anſwer our ideas of his power and riches, and it is not difficult to diſcover his wiſdom in the former, and his love of pleaſure in the latter. It is probable that his character as a wiſe and yet voluptuous prince may have given riſe to an opinion, which, with reſpect to Balbec at leaſt, ſeems to have ſcarce any other foundation; for an eaſtern monarch could not enjoy his favourite pleaſures in a more luxurious retirement, than amidſt the ſtreams and ſhades of Balbec. Many ſtories are there told of the manner in which he ſpent his hours of dalliance in this retreat: a ſubject on which the warm imagination of the Arabs is apt to be too particular.

Whether the Phœnicians did not erect theſe temples in the neighbourhood of their capital, may be a more reaſonable enquiry: for it is pretty certain, that the ſun was worſhipped here in the flouriſhing times of that people, when this plain was probably a part of their territory.

According to Macrobius, the city derived both its name and worſhip from Heliopolis in Egypt; and he obſerves, that the ſtatue of Heliopolitan Jove was brought from thence to this city. "This divinity, he obſerves, was both Jupiter and the Sun. This, he adds, appears by the rites of the worſhip, and by the attributes of the ſtatue, which is of gold, repreſenting a perſon without a beard, who holds in his right hand a whip, like a charioteer, and in his left a thunderbolt, together with ears of corn, all which mark the united powers of Jupiter and Apollo; and the temple excels in divination."

But

Engraved for the General Magazine, *for W. Owen at Temple Bar.*

The Ananas.

But inſtead of looking for buildings of the Corinthian and Ionic order in the Jewiſh and Phœnician hiſtory, it may be thought more proper to enquire for them during the time when the Greeks poſſeſſed this country: but from Alexander's conqueſt of it to that of Pompey, we do not find them mentioned; from which reaſon we conclude, that they muſt be works of a later date; and, indeed, John of Antioch, ſurnamed Malala, ſays that Ælius Antoninus Pius built a temple to Jupiter at Heliopolis, near Libanus, in Phœnicia, which was one of the wonders of the world. This is the only hiſtorian who mentions the building of a temple in this city.

Deſcription of the ANANAS, *when ripe, Plate* 2.*

THIS plate repreſents a ripe ananas, which muſt be peeled before it can be eaten. Its ſkin is about an inch thick, and if it be not entirely taken off, there will remain ſmall fibres which are very troubleſome and cauſe ſharp pains to the tongue. This fruit taſtes like raiſins, pomgranates, gooſberries, apples and pears mixed together; it has a very ſtrong and agreeable ſmell, and when it is cut it fills a whole room with its odour. When the crown with which it is covered, and the young ſprigs are put into the ground, they produce new plants, and ſprout up on all ſides like weeds. It is at leaſt ſix months before the ſprigs can become perfectly ripe. This fruit may be eaten either raw or dreſſed. One can extract from it, by fire and a preſs, very pleaſant wine and brandy, which greatly excel all other drink of the ſame kind.

About the beginning of May 1701, I found upon certain herbs that grew near an ananas, the caterpillar which is ſeen in the plate: it was of a greeniſh colour, having a red and white ſtreak all along its back. On the 10th of May, it was changed into a *nympha*, which, on the 18th of the ſame month, produced a very beautiful butterfly, yellowiſh, and ſpeckled with a light green, and ſuch as it is here repreſented flying and reſting on the fruit.

Upon the crown of this ananas, is a little red worm, that weaves a very thin ſcarlet web; in which, a ſmall nympha is folded up: 'tis that worm which eats the cochineal. I myſelf have met with ſeveral of them, and they are found very often in the cochineal that is ſent to Europe, as every one that is curious may know by experience. Over the web that this inſect ſpins, upon the crown of the fruit, is a ſmall bean, in which, upon cutting open the ſkin, I found the cochineal juſt as it is here deſcribed at the top of the crown: 'tis nothing elſe than the bodies of the two beetles repreſented in the ſame plate, the one flying, the other ſitting, whoſe red wings are bordered with black. I have added them here purely for the ornament of the plate, having taken them from the dry cochineal only, as ſome other curious naturaliſts have done;

* See Plate 1, Page 158.

done; for this does not in the leaſt concern the tranſformation of the inſects of America.

If we view this butterfly with a microſcope, we ſhall ſee that its wings are covered with a fine duſt like meal, which forms as it were ſcales like thoſe of a fiſh: each of them has three teeth with very long hairs; and they are diſpoſed in ſuch a manner, that one may eaſily count them. The whole body is covered with a kind of quills mixed with hairs.

To the EDITOR *of the* GENERAL MAGAZINE.

SIR,

THE Hail-ſtones which fell in the ſtorm of the laſt Month, in and about *London*, are, I find, generally reckoned to have been as large as any on record, in theſe parts; and indeed I myſelf picked up ſeveral of them in *Cold-Bath-Fields*, which were nearly, if not quite, as big as Muſket Bullets. Theſe however were greatly inferior in ſize to ſome mentioned by the celebrated Dr. *Hooke*, Fellow of the Royal Society, and *Greſham* Profeſſor of Aſtronomy, in a very curious account, preſerved by his friend the Rev. Dr. *Derham*, late Canon of *Windſor*, which is as follows,

On *May* 18, 1680, about $10\frac{3}{4}$ Hour in the Morning, in *Greſham-College*, I obſerved the falling of a great ſhower of Hail; concerning which I noted theſe particulars.

The day before, it rained almoſt all day, gentle rain, and, by turns, the fore part of the Night. At about three or four o'clock in the morning, was very much Thunder and Lightning, with an exceeding violent ſhower of rain: Whether any Hail fell then, I know not, being in Bed; but by ſome Circumſtances I believe there did, for there were found, in the morning, ſeveral great ſpots of wet, which, 'tis probable, proceeded from Hail-ſtones that fell down the chimney. It continued to rain, and now and then to thunder much, 'till about nine; then it cleared up, the ſun ſhone very bright, and there was ſcarce a cloud to be ſeen. About ten it began to thicken, and I heard the thunder to the ſouth-eaſt: At about half an hour after ten, it grew very dark, and thundered very near; and ſoon after there began to fall a good quantity of Hail-ſtones, ſome, of the bigneſs of Piſtol Bullets, others, as big as Pullets Eggs, and ſome above $2\frac{1}{2}$ Inches, and near three inches over the broad way: the ſmaller were pretty round and white, like chalk, or ſugar-plumbs; the others of other ſhapes. Breaking many of them, I found them to be made up of orbs of Ice, one encompaſſing another; ſome of them tranſparent, and ſome white and opaque; ſome of theſe were to the bigneſs of near an Inch in Diameter, and were orbicular every way. Some of them had the white ſpot in the middle, others to one ſide, and the variety of white and tranſparent ſpots very differing. Thoſe which exceeded theſe in Bigneſs, were made

made by an additional accretion of tranſparent Iſicles, radiating every way from the ſurface of the white ball, like the ſhooting of nitre, or toothed Sparre. Theſe, in ſome, ſtood, as it were, ſeparate in diſtinct Iſicles, which were very clear and tranſparent, and had no Blebs or Whiteneſs in them. Others of them were all concreted into a ſolid lump, and the interſtices filled up with ice, which was not ſo clear as the *Stiriæ*, but whiter; and thereby one Side, which, I ſuppoſe, was the undermoſt, was flat, almoſt like a Turnip; and the Radiations appeared to proceed from the ball in the middle, more towards the upper ſide, and moſt towards the ſides: the edges and tops were more rough, and the ends of the *Stiriæ* appeared prominent.

The extent of this Shower I cannot yet certainly learn, but have, by the information of ſeveral, underſtood that it was ſeen above ten miles off. I was alſo told by ſeveral Perſons, that, a little before the Hail fell, there was heard a great noiſe from the Sky, like the ſhooting or emptying of a cart-load of pebbles, as if they had fallen one upon another in the air.

From the manner of their Figure, I conceive, their Accretion was made by a congelation of the water, as they fell: that the ſmall white Globules in the middle, about the bigneſs of a pea, were the firſt drops that concreted into hail. Theſe, in falling through the clouds beneath, congealed the waters thereof into ſeveral coats or orbs, till ſome of them came to the Bigneſs of pigeons eggs, ſome white, ſome tranſparent, according to the ſeveral degrees of coldneſs they paſſed through whilſt the water congealed; that the laſt accretion was made by a more violent and ſudden cold, in the lower part of the cloud, where they paſſed through almoſt a continued body of water. Other varieties of their forms, which were very many, I conceive, muſt be made by their meeting with one another in their paſſage. — *Thus far Dr.* Hooke.

Dr. Derham *adds*, —— I, myſelf noticed Hail-ſtones that fell in great numbers in *Lincoln's-inn-Fields*, *May* 19, 1680; one of which a Servant brought me in his Hand, as large as a Turnip, and of the ſame Shape, which I inſtantly meaſured with a ſtring, and found the compaſs of the wideſt part to be above thirteen Inches; which I confeſs, ſeems incredible; but, I think, I did it with great care, and was not miſtaken. *W. D.*

Your conſtant Reader,

METEOROLOGICUS.

On the going back of the Shadow on a Sun-dial; *by a Member of the* Philoſophical Society *at* Oxford.

BY a Stile, I underſtand a ſtreight line inſiſting on a plane, and caſting a Shadow thereon.

A perpendicular Stile, I call that which is perpendicular to the Plane; an oblique Stile, which is oblique.

By the Meridian of the Plane, I mean a great Circle drawn through the Pole of the world, and Poles of the Plane.

Suppoſe a Circle deſcribed on the Plane from the Foot of the Stile, (that is, the point where it cuts the Plane) as a centre. The way of the Shadow I reckon on the circumference of this Circle: And note, when the ſhadow goes one way round this circle, without change, during one Day, I ſay it is wholly Direct: But if it changes its Courſe, the firſt Motion it takes before the change, I call Regreſſion, or Backward; and the ſecond Motion I call Progreſſion, or Forward; for 'tis the firſt Motion that I conceive contrary to what is uſual, and which I therefore call retrograde, rather than Direct. In this Senſe the Shadow may be twice Retrograde, and once Direct in the ſame Day, as ſhall be demonſtrated.

Prop. I. The Shadow of the Stile on the Plane, is the common Section of the Plane, with the great Circle drawn through the Sun and Style.

Prop. II. The Semidiameter of the Earth is inſenſible, in reſpect of the vaſt Diſtance of the Sun from us; therefore the foot of the Stile, which is really at the Surface of the Earth, may be ſuppoſed the Centre of the Earth; and conſequently the Plane of the Dial may be taken for the Plane of a great Circle of the ſphere, parallel thereto.

Prop. III. The Shadow cannot go Backward (in the ſame Day, and ſo underſtand in the following), if the Stile continued, does cut the Plane of the Diurnal Circle (which the ſun deſcribes in the Heavens, otherwiſe called his Parallel) in, or within its Perimeter; becauſe the Shadow is always in a plane, drawn through the Sun and Stile, if the Point of Section is in or within the Diurnal Circle's Perimeter, becauſe the Sun goes conſtantly forward, ſo will the Shadow.

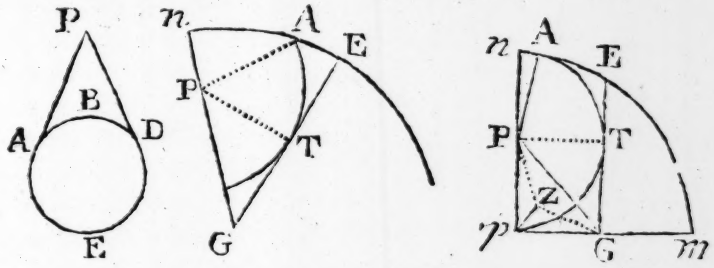
Cor. I. If the Stile be the axis of the world, the Shadow cannot go back: For the Axis cuts all the parallels of the Equator in their Centres; therefore in no Latitude can a Plane and Stile be placed ſo, that the Shadow, which ſhews the Hour with its whole Length, may go backward; only a Stile may be ſo placed, that its Shadow may go Backward, and a *Nodus* therein ſhew the Hour.

Cor. II. The Shadow cannot be made to go Backward on either of the Equinoctial Days; for then the Sun's Diurnal Circle, being a great Circle, is cut, by the Stile, through the Centre.

Cor. III. The Shadow cannot go back, if the Stile Point be without the Tropics; for then it will cut the planes of all the Diurnal Circles within their Perimeters.

Prop. IV. If the Stile cut the Plane of the Diurnal Circle without its Perimeter, the Shadow will go forward and backward in 24 Hours, provided the Sun ſhine a ſufficient part of the 24 Hours, on the Plane.

For



For ſuppoſe P, the Point where the Stile cuts the Plane of the Diurnal Circle; from P draw two lines touching the Circle in A D; 'tis evident the Shadow goes one Way, while the Sun paſſes the Arc A B D; but the contrary Way, while it paſſes D E A.

Cor. If the Arc which the Sun deſcribes, while it ſhines on the Plane, be part of A B D, and Part of D E A, the Shadow will go Forward and Backward.

Prop. V. If from that Point in the Surface of the Globe, which repreſents the Top of the Stile, two great circles be drawn, touching the Sun's Parallel; and if the Dial-Plane cut off an Arc of the Parallel, of which all, or Part is viſible (above the Horizon); if alſo either of the Points of Contact be included within the Extremes of this viſible Arc; then will the Shadow go backward, till the Sun come to the Point of Contact; after which it will go forward, till it come to the other Point of Contact, and then the Shadow will go backward again.

Cor. I. The Shadow, in one Day's Time, in any Latitude, however the Plane and Stile be placed, can change its Courſe but twice; that is, it may be Retrograde, Direct, and Retrograde, but not a ſecond Time direct.

Cor. II. 'Tis evident there are in any Latitude, innumerable Diverſities of Inclination of the Dial-Plane to the Horizon, and of the Stile to the Plane; alſo of Declinations of both Stile and Plane from the Meridian, whereby the Shadow may be made to go backward.

Prop. VI. The Shadow cannot go Back, while the Sun is nearer to the Equator, than the Top of the Stile to the Equator. And this holds good, whether the Sun and Top of the Stile be on the ſame, or different Sides of the Equator. For the Planes of all Diurnal Circles, which are nearer to the Equator, than the Top of the Stile, are cut by the Stile within their Perimeters, becauſe the Stile paſſes through the Centre of the Sphere.

Cor. The nearer the Stile points to the Equator, the more Days in the Year will the Shadow go back; but then, in any one day it will go back the leſs, *cæteris paribus.*

Prop. VII. The Shadow of a Stile pointing to any one Place of the Heavens, betwixt the Equator and either Tropic, will go back all thoſe Days wherein the Sun's Parallel is further from the Equator, than the Top of the Stile is from the Equator. And this holds, whether

the Sun and the Top of the Stile be on the ſame or different Sides of the Equator: But with this *Proviſo*, in both Caſes, that the Point of Contact lie in the viſible Diurnal Arc above the Plane. For Example, In the Latitude of *Oxford*, if a Stile point as far North, as is the Beginning of the Sign *Taurus*; then the Shadow will be retrograde every Day while the Sun paſſes through *Taurus*, *Gemini*, *Cancer*, *Leo*. But while the Sun paſſes through *Virgo* and *Libra*, the Shadow is only Direct, or Forward: Then in paſſing through *Scorpio*, *Sagittarius*, *Capricorn* and *Aquarius*, 'tis Retrograde again; but with this Difference, that if the Shadow is twice Retrograde, any Day, while the Sun runs a Northern Parallel, then it will not be Retrograde once in the Day of the oppoſite Southern Parallel. But if the Shadow is once Retrograde in a Day of the Northern Parallel, then it will be alſo once Retrograde in the Day of the oppoſite Parallel.

PROP. VIII. If a perpendicular Stile point any where in the Equator, the Shadow cannot go Back any Day in the whole Year; for all the Points of Contact lie in the Dial-Plane, to wit there, where it is croſſed by the Diurnal Circles.

PROP. IX. If an oblique Stile point to the common Section of the Equator and the Meridian of the Plane; the Shadow will be Retrograde, during that half Year, while the Sun has Declination towards that Pole which is elevated above the Plane. The other half Year, while the Sun is toward the depreſſed Pole, the Shadow will be only Direct; for in the firſt half year the Points of Contact are above the Plane; in the ſecond, under.

PROP. X. If an oblique Stile point to any Place of the Equator in the Heavens, except thoſe, where the Meridian of the Plane croſſes the Equator; if withal, a great Circle deſcribed from the Top of the Stile on the Globe, as a Pole, does croſs the long Diurnal Arcs, or of thoſe Parallels which are toward that Pole of the World which is elevated above the Plane; I ſay, if the ſaid Circle croſs the long Arcs any where above the Plane, then will the Shadow be Retrograde, thoſe days in which the Sun deſcribes thoſe arcs, and on no other Days; for where the ſaid Circle croſſes the Arcs, are the Points of Contact. For Example; in all Direct South-reclining Planes, above which the North Pole is elevated, the Shadow goes Back all our Summer half year; but it is only direct all the Winter half Year. But in other Planes the too great Declination, or Inclination of the Plane, may cauſe the Point of Contact to fall under the Plane; ſo as only in a ſmall Part of Summer, and in no Part of Winter, the Shadow may go Back.

PROBLEM. *Any Day being given, together with the Latitude of the Place, and the Situation of the Stile and Plane, to calculate the Time and Quantity of the Shadow's Regreſſion on that Day.*

Suppoſe the Dial were Horizontal, and the Stile perpendicular thereto: becauſe the Stile muſt piont within the Tropics, this caſe can happen only in the Torrid Zone, yet not in the Equator (by *Prop.* 8.)

8.); nor can the Shadow go back, when the Sun is on one Side of the Equator, and the Stile on the other, though at leſs diſtance, becauſe the Points of Contact are both under the Horizon; but then, to recompence this, the Shadow is twice Retrograde every Day; which to calculate, ſuppoſe Z the Zenith of the Place 10 Degrees North of the Equator, which is now ſuppoſed the Pole of the Plane, and the Top of the Stile in the Heavens. Suppoſe the Sun in the Tropic of *Cancer*, and P the Pole of the World, T the Point of the Contact, that is, where the Great Circle Z T, drawn from the Top of the Stile, touches the Tropic. Then in the right-angled Triangle Z P T, beſides the right-angle T, there is given P T, the Sun's Co-Declination, and Z P the Co-Latitude of the Place; thence may be found the Angle Z P T (as in *Fig.* 3.) the Sun's Diſtance from the Meridian, when the Shadow begins to change its Courſe; alſo the Angle P Z T, from which if you take the Sun's Azimuth from the North, at Riſing, the Reſidue is the Quantity of the Shadow's Regreſſion on the Circle of the Dial-Plane.

What has been ſaid of a Horizontal Plane, in the Torrid Zone, holds true for any Latitude out of the Torrid Zone, if you incline the former Plane till its perpendicular Stile point in the Meridian 10 Degrees above the Equator, that is, where it did in the Torrid Zone.

At 5 Hours 42 Minutes in the Morning the Sun riſes on this Plane; at 7 Hours 36 Minutes the Shadow changes its Courſe; ſo the Duration of the Regreſſion is 1 Hour 54 Minutes; the Quantity of the Regreſſion is 4 Degrees 26 Minutes. And ſo much, and at the ſame Diſtance from the Meridian, is the Retrogradation in the Afternoon. Thus it is at the Summer Solſtice on this Plane; but the Regreſſion will grow every Day leſs, as the Sun in his Diurnal Courſe, comes nearer the Top of the Stile; ſo as when the Sun runs over the Stile, then the Regreſſion ceaſes.

EXAMPLE. II. Suppoſe an Horizontal Plane in the Latitude of *Oxford*, and the Sun in *Cancer*, the Stile pointing to G (in *Fig.* 2.) 10 Degrees in the Meridian, above the Equator: From G draw a Great Circle, touching the Tropic of *Cancer* in T; ſuppoſing this Circle continued, to cut the Horizon in E P, to be the Pole of the World, and that the Circle G P, continued, cuts the Horizon in *n*, and that the Tropic cuts the Horizon in A. In the right-angled Triangle G T P, G P and P T are known; thence may be found the Angle T P G, the Sun's Diſtance from the Meridian, when the Shadow changes its way, and the Angle P G T; then in the right-angled Triangle P *n* A, P *n*, the Height of the Pole, and P A, the Sun's Co-declination, are given; thence *n* A may be found; and in the right-angled Triangle G *n* E, G *n*, and the Angle E G *n* = P G T, are known, whence E *n* may be found; but *n* E — *n* A = A E, which is the Quantity of the Shadow's Regreſſion: to wit, the Shadow, in this Example, begins to change at 7 Hours 36 Minutes, in the Morning, and the Sun riſes at 3 Hours 46 Minutes; therefore the Duration of Regreſſion is 3 Hours 50 Minutes,

Minutes, and the Quantity of Regreſſion 12 Degrees 25 Minutes. And ſo much, and at the ſame Diſtance from the Meridian, it is again in the Afternoon.

EXAMPLE III. A Plane having any given Poſition, ſuppoſe 14 Degrees Declination, or Azimuth, weſtward, and 71 Degrees Reclination; that is, its Pole *p* (in Fig. 3) 19 Degrees from the Zenith Z, ſuppoſe of *Oxford*, which is diſtant from P, the Pole of the World 38 Degrees 14 Minutes; alſo a ſtile being any ways inclined to this Plane, yet ſo as to point betwixt the tropics; as ſuppoſe G the Top of the Stile, or Gnomon of the Globe, has 23 Degrees Azimuth, Eaſtward, and 42 Degrees Diſtance from the Zenith, on any Day propoſed; ſuppoſe at the Summer Solſtice, when the Sun is farther from the Equator, than G from the Equator; to find when the Sun ſhall begin, and ceaſe to ſhine on the plane, and whether the Shadow ſhall at all be Retrograde in the Morning; and if ſo, how much, and when it ſhall be? Like to which is the calculation for the evening.

From G draw a great Circle, touching the Tropic in T, and cutting the Dial-circle in E; produce the Great Circles *p* P, *p* G, till they cut the Dial-Circle in N, M. Suppoſe A the Point where the Tropic cuts the Dial-Circle. Firſt in the Triangle G Z P, we have G Z, Z P and the Angle G Z P; thence we may find the Angle G P Z, and Z G P, and P G; then in the right-angled Triangle P T G, we have P G, and P T, the Sun's Co-Declination; thence we may have the Angle P G T. Then the Angle Z P G + G P T = Z P T, the Diſtance of the Sun from the Meridian, when the Shadow ceaſes to be Retrograde, or firſt changes its way. In the Triangle *p* Z G, we have *p* Z, Z G, and the Angle *p* Z G; thence we may find *p* G, the Angle *p* G Z, and the Angle G *p* Z. In the Triangle P *p* Z, we have Z P, Z *p*, and the Angle *p* Z P; thence we may have P *p*, the Angle P *p* Z and *p* P Z; then the Quadrant *p n* — *p* P = P *n*; and the Quadrant *p m* — *p* G = G *m*; and the Angle P *p* Z + G *p* Z = P *p* G = *n m*. Then the two Right-angles — Z G *p* — Z P T = E G *m*. Then in the Right angled Triangle E G *m*, we have the Angle E G *m*, and G *m*; thence we may find *m* E. Then in the right-angled Triangle P *n* A, we know P *n*, and P A, the Sun's Co-Declination; thence we may get N A, and the Angle *n* P A. Then the two Right-angles — *p* P Z — *n* P A = Z P A, which is the Time before Noon, at which the Sun begins to ſhine on the Plane. Then Z P A — Z P T = A P T, is the Duration of the Shadow's Regreſſion. If Z P A is not greater than Z P T, the Shadow will not be Retrograde at all. Laſtly, *m n* — *m* E — *n* A = A E, the Quantity of Regreſſion.

Of the VALUE *and* USE *of* MEDALS.

Firſt. THE value of Medals, in common computation, is rated not by the Metal, or Size, nor merely by their Antiquity, but by their Rarity. The Metal is of ſo little conſideration, that a Copper

Copper Medal is ſometimes valued at a much higher rate than a Silver, or a Gold one: For inſtance, the Copper *Otho*, of the larger ſize, called a *ſingular medal*, becauſe there is ſuppoſed to be but *one*, or however very few of them in the world; is of almoſt ineſtimable value; while a Gold one ſhall not ſell for above two or three guineas more than its weight. And if a piece of King *Numa*'s leather money could now be found, it would, no doubt, be valued above any gold one. Such a ſingular coin is a ſilver Greek Medallion of *Peſcennius*, which is in the French king's cabinet. Hence the medals of thoſe emperors, who reigned a ſhorter time, are generally more valued than thoſe that reigned longer; becauſe there were fewer of them ſtruck, and they are therefore the rarer. Yet ſometimes an uncommon Reverſe ſhall give a great value to a medal, whoſe Head, with another Reverſe, is very common.

In collecting of medals great caution is to be uſed, that we are not impoſed upon by counterfeits; eſpecially of ſuch medals as are ſcarce and rare. For that purpoſe we muſt attend to the Field, and obſerve whether it is ſmooth, and free from marks of the ſand which may commonly be ſeen on caſt medals: to the letters and figures which are never ſo ſharp and clean in caſt medals as in ſtamped ones; to the edges, to obſerve whether there be any marks of the file, which has been uſed in a caſt medal; eſpecially in that part where the metal ran into the mould. We are to obſerve again, whether there be any cracks in the edges; for though the abſence of them be no certain ſign of a counterfeit; yet, when they are found, they are looked upon as pretty good indications of the Medals being genuine. But nothing is more to be regarded than the *colour* and *varniſh*, eſpecially of Copper Medals; many of which have a certain inimitable varniſh and politure; ſome *green*, ſome *blue*, others of a *rediſh brown*; which whether it was given them by art, or has been contracted by age, is not abſolutely determined: though the latter ſeems more probable, ſince all the art of the falſifiers, whether by *Sal Armoniac*, *Vinegar*, *burning paper upon them*, *burying* them in the earth, or any other way, has by no means equaled it. There is indeed a Green Varniſh, which is commonly uſed for this purpoſe, that is pretty enough; but it is too bright and glaring; ſo that a little experience will enable a perſon to diſtinguiſh it from the antique.

Secondly. As to the Uſe of ancient medals, beſides a thouſand little impertinences, as *Addiſon* calls them, that are very gratifying to curioſity, ſuch as the dreſs of the moſt celebrated ladies of antiquity, the flattering titles affected by this and the other emperor, and the honours he payed to his family and friends; the adepts in Phyſiognomy would not forgive me, if I ſhould not alſo mention in this claſs, the features and liniaments of ſo many illuſtrious perſonages as are to be met with in ſtatues and medals. But beſides theſe and many other like matters of mere, yet very entertaining curioſity, they are capable of ſeveral more ſubſtantial uſes; concerning which the learned *Spanheim* has publiſhed a large volume,

volume, *De Preſtantia et uſu Numiſmatum Antiquorum:* For inſtance, they are of very conſiderable ſervice in hiſtory; for beſides, that many facts and events, not recorded by any of the ancient hiſtorians, may be collected from them, they throw great light on ſeveral obſcure paſſages in thoſe writers. And indeed there is hardly any conſiderable event in the Græcian or Roman hiſtory, to which ſome reference may not be found in the coins of thoſe nations. So that a cabinet of medals may be conſidered as in a manner a body of hiſtory; being converſant with which will fix hiſtorical facts and circumſtances upon the memory with more eaſe, as well as give a greater degree of certainty concerning them, than books alone will ordinarily do.

Chronology receives not a little aid from medals, as they not only perpetuate the memory of illuſtrious actions, but often mark the year when they were performed.

Geography hath been greatly beholden to this ſcience, for aſcertaining the names of ancient places, the founders of cities and colonies; and ſometimes their ſituation, by the neighbourhood of ſome noted river, mountain, &c. expreſſed by ſome device on a medal.

By the help of medals we diſcover what honours and privileges certain cities were anciently poſſeſſed of. For inſtance, we learn from them, what cities, beſides Rome, had the privilege of Roman citizens. The honour of a city's being νεωκορος is celebrated on many Grecian medals; which imports that it had a temple in it, where the ſolemn ſacrifices of the whole province were performed for their prince, and public games were exhibited to his honour, as often as his permiſſion could be obtained for that purpoſe. Hence we ſee on ſome medals ΔIC, TPIC, TETPAKIC, &c. NEΩKOPΩN. For though the word νεωκορος, derived from ναος, *templum*, and χωρεω, *verro, purgo*, doubtleſs imported originally a mean office, namely, that of a Sacriſtan, or Sexton; yet in time it came to be a term or title of honour, importing not only the celebration of the games (as we have ſaid before,) but alſo the religious devotion of a city to ſome deity: in which ſenſe it is applied to the city of *Epheſus*, Acts xix. 35. ſaid to be νεωκορον της μεγαλης Θεας Αρτεμιδος, και του Διοπετους: and therefore I apprehend, more properly rendered in that place *cultricem* in the vulgate, and *worſhipper* in our Engliſh tranſlation, than *Ædituam*; as in *Beza*, and in ſome others.

We learn alſo from medals, in many caſes, which was the chief city or metropolis of a province; and in what ſenſe a city is called πρωτη, when it was not the metropolis, as *Philippi* is ſaid to be πρωτη της μεριδος της Μακεδονιας πολις, κολωνια, Acts xvi. 12. That *Philippi* was a Roman Colony, appears from a medal ſtruck in the reign of *Claudius*, with this legend, COL. AUG. IVL. PHILIP. that is, *Colonia Auguſta Julia Philippi*, or *Philippenſis*. And in what ſenſe this city was πρωτη πολις, though *Theſſalonica* was undoubtedly the metropolis or chief city of the province, may be gathered from the uſe of the word

word πρωτη, as applied to ſeveral other cities on ancient coins: as in the pro-conſular *Aſia*, not only *Epheſus*, which was the chief city, but *Smyrna*, and *Pergamus*, have the title πρωτη: and in *Bythinia*, not only *Nicomedia*, which was the metropolis, but *Nicea* is alſo called πρωτη. Now, *Spanheim* ſhews, that this title, when thus applied to inferior cities, refers to the games which ſeveral cities joined in ſupporting, and of which one was the πρωτη. In this ſenſe *Philippi* was the πρωτη πολις, (not της επαρχιας, but της μεριδος,) of a particular diſtrict of *Macedonia*.

I have not yet mentioned all the arts and ſciences which receive light and aid from medals. Sculpture and painting have revived, in later ages, along with this ſtudy; to which thoſe arts are greatly indebted for noble hints and patterns. The ſame may be ſaid of architecture, which now borrows its fineſt ornaments from the plans and models of ancient temples, ports, triumphal arches, and other public edifices, preſerved on medals. Mr. *Addiſon* has abundantly convinced us of their uſe to explain numerous paſſages in the claſſics. By their means the natural philoſopher alſo acquaints himſelf with a great variety of foreign plants and animals. And the divine, not only finds the uſefulneſs of medals, for explaining and illuſtrating ſeveral texts of ſcripture, as we have ſeen above; but hereby he informs himſelf of the ancient theology of the Greeks and Romans: here he ſees the gods they worſhipped, and their attributes expreſſed in ſignificative emblems; here he ſees their altars and adorations; and the inſtruments with which they performed their ſacred rites. Upon the whole, therefore, though it cannot be denied that ſome perſons have carried the ſtudy of medals to a ridiculous extravagance; yet it by no means deſerves to be treated with the contempt it is by others, or to be wholly neglected.

On the LAWS *of* ENGLAND.

Statutes 3 *Geo.* III. *continued from p.* 170.

CHAP. 14.

Buildings.

BY Sect. 1. ſo much of ſtat. 11 Geo. I. CHAP. 28. intituled "An act for the better regulating of buildings, and to prevent miſchiefs that may happen by fire within the weekly bills of mortality, and other places therein mentioned," as relates to party walls within the city and liberty of Weſtminſter, or any place within the weekly bills of mortality, or the pariſhes of St. Mary-le-bone and Paddington, or Chelſea and Pancras in Middleſex, (except London and the Liberties thereof, and the party walls of houſes on the river Thames below bridge,) ſhall extend to all caſes whatever within the ſaid city and liberty, pariſhes, and places aforeſaid were neceſſary to pull down and rebuild any party wall; whether either of the adjoining houſes ſhall be to be rebuilt or not.

By ſect. 2. where a majority of the workmen appointed in purſuance of the ſaid act of 11 Geo. I. CHAP. 28. to view any party wall to be pulled down, ſhall not ſign a certificate as thereby required, two neighbouring juſtices upon application may name another to be added to them, and the majority then agreeing in a report of ſuch wall being defective, the ſame may be pulled down and rebuilt, and a moiety of the expences recovered according to the ſaid recited act.

By ſect. 3. all party walls which, after three months, ſhall be built within Weſtminſter, and the pariſhes aforeſaid, ſhall be two bricks and an half thick in the cellar, and two thick upwards to the garret, and one and an half thick eighteen inches above the roof adjoining to ſuch walls, and ſhall be built with ſtone or good bricks.

By ſect. 4. no timbers, except thoſe of girders, binding joiſts, and templets under them, ſhall be laid into the party walls, to be built within the places aforeſaid, and no timbers of the roof ſhall be laid into ſuch party walls (except the purloins or kerb thereof) and the ends of girders, and binding joiſts, lying within ſuch party walls, ſhall not exceed nine inches, and none of the ends of the girders, &c. ſhall meet each other, and the ſides thereof ſhall be fourteen inches diſtant, and nine inches of ſolid brick-work ſhall be left at the ends of all lentels, wall, plates, and bond timbers, laid in the walls of fore and back fronts of all houſes adjoining to each other, every perſon not conforming to theſe directions, or uſing bricks not duly burnt, ſhall forfeit 50*l.* to be levied by diſtreſs and ſale, or by action in any of the courts at Weſtminſter, with double coſts.

By ſect. 5. after the 1ſt day of July next, no timber ſhall be laid under the hearth of any room, or within nine inches of any chimney of any houſe within the limits aforeſaid; and no timber buildings ſhall be built adjoining to any houſe, ſo as the timbers ſhall be laid into the wall of ſuch houſe, under the penalty of 50*l.*

By ſect. 6. after any party wall ſhall be built purſuant to this act, no perſon whatever who ſhall build againſt ſuch wall, ſhall cut into the ſame, nor ſhall lay therein other timbers than allowed by this act under the penalty of 50*l.*

By ſect. 7. every maſter builder who ſhall, after the ſaid *firſt* day of July, build any houſe within the limits aforeſaid, ſhall, within 14 days after covered in, cauſe the ſame to be ſurveyed; and ſuch ſurveyor ſhall make oath before a juſtice of peace, that the ſame hath been built agreeable to this act: the not complying with the above incurs a forfeiture of 50*l.*

By ſect. 8. the juſtices, at the quarter ſeſſions, ſhall, upon application to them by any perſon deſirous to pull down or rebuild any houſe, aſcertain the property and fix the value of what may be found neceſſary for erecting perpendicular party walls upon old foundations, and for that purpoſe ſhall ſummon a jury, and the order made upon their verdict ſhall be final.

By

By ſect. 9. the directors of inſurance offices within London and Weſtminſter, upon the application of any perſon intitled to any houſe which ſhall be burnt down, upon any ſuſpicion that the inſured have been guilty of fraud, or of ſetting their houſes on fire, ſhall cauſe the inſurance money to be laid out towards rebuilding ſuch houſes, unleſs the claimants of ſuch inſurance money ſhall within ſixty days, give ſecurity to the office, wherein ſuch houſe is inſured, that the ſame ſhall be ſo laid out, or unleſs the ſame ſhall be diſpoſed of amongſt the parties to the ſatisfaction of the ſaid directors.

By ſect. 11. limitation of actions reſtricted to ſix months after fact done.

By ſect. 12. the expence of party walls pulled down and rebuilt, in purſuance of this and the ſaid recited act of 11 Geo. I. CHAP. 28. ſhall be eſtimated at the rate of ſix pounds ten ſhillings *per* rod.

By ſect. 14. The back and fore fronts of all future buildings, ſhall be built of ſtone or good bricks from the breaſt-ſummer upwards, as alſo the party walls, the height of the breaſt-ſummer ſhall not exceed the floor of the one pair of ſtairs.

By ſect. 15. In all caſes where any reward ſhall be claimed, the keepers of other large engines, ſhall be equally entitled with the parish engines, by virtue of ſtat. 6 An. chap. 31.

Chap. 16.

By ſect. 1. Infants ſeized of eſtates within the dutchy of Lancaſter, or counties palatine of Cheſter, Lancaſter, or Durham, or principality of Wales, may by order of court, upon petition or motion, make conveyances thereof good in law. *Infants.*

By ſect. 2. Infants being only truſtees or mortgagees are compellable by order, to make conveyances and aſſurances accordingly.

Chap. 21.

By ſect. 1. The chancellor of the county palatine of Durham, and the juſtices of the court of pleas there are impowered to iſſue commiſſions to take affidavits in cauſes depending in their reſpective courts, which are to be filed in their proper courts, and may be read in evidence. *Affidavits.*

Chap. 22.

By ſect 1. ſtat. 5 Geo. 2. c. 28. Intitutled "An act for encouraging the Greenland fiſhery" is further continued to 25 Dec. 1767. *Fiſhery.*

By ſect. 2. ſtat. 6 Geo. 2. c. 33. Intituled "An act for further encouragement of the whale fiſhery carried on by his majeſty's [*Britiſh*] ſubjects" is further continued to 25 Dec. 1767.

By ſect. 3. ſtat. 22 Geo. 2. c. 45. Intituled "An act for the further encouragement and enlargement of the whale fiſhery, and for continuing ſuch laws as are therein mentioned relating thereto, and for the naturalization of ſuch foreign proteſtants, as ſhall ſerve for the time therein mentioned, on board ſuch ſhips as ſhall be fitted out for the ſaid fiſhery," is further continued to 25 Dec. 1767.

Chap. 23.

Apprentices. By ſect. 26. Upon payment of the rates and duties upon monies received with clerks, apprentices or ſervants or ſuch part thereof omitted to be inſerted in words at length in indentures, or other writings, containing agreements for the ſervice of clerks, &c. on or before the 29th day of September next, the ſame indentures, &c. ſhall be good in law, and the clerks, &c. capable of following their reſpective imployments, and diſcharged from penalties.

Chap. 28.

Proviſions. By ſect. 1. His majeſty is enabled with the adviſe of the privy council, to order the importation of ſalt proviſions from Ireland during the receſs of parliament.

By ſect. 2. All perſons are exempted from the payment of duties, and from penalties on account of ſuch importation.

By ſect. 3. Except duties to the commiſſioners for the duties on ſalt, which are particularly ſpecified in this ſection, and are to be paid over into the Exchequer as part of the duties on ſalt.

By ſect. 4. Any of the ſaid proviſions being landed without duty firſt paid, are forfeited with 20*s. per* barrel.

By ſect. 5. No drawback is to be allowed on exportation elſewhere.

By ſect. 6. Nothing herein contained ſhall authorize the free importation of ſalted beef, ſalted pork, bacon, or butter from Ireland; unleſs when the price of the beſt ox beef in Smithfield market ſhall exceed threepence *per* pound for the four quarters, and unleſs the price of the beſt pieces of ſuch beef ſhall exceed four-pence *per* pound at Leadenhall market; and unleſs the price of the beſt pork ſhall exceed four-pence *per* pound, the beſt bacon ſeven-pence *per* pound, and of the beſt butter ſhall exceed nine-pence *per* pound, at Leadenhall-market aforeſaid.

By ſect. 8. No order, permiſſion, or authority, for the importation of butter from Ireland into this kingdom, ſhall be given or granted, till after the 1ſt day of June, 1764.

Chap. 31.

Oaths. By ſect. 1. Every perſon who ſhall on or before the 28th day of November 1764, take and ſubſcribe the oaths and aſſurance in ſuch manner and place as appointed by 1 Geo. ſtat. 2. c. 13. intituled "An act for the further ſecurity of his majeſty's perſon and government, and the ſucceſſion of the crown in the heirs of the late princeſs Sophia, being proteſtants; and for extinguiſhing the hopes of the pretended prince of Wales and his open and ſecret Abettors;" and alſo receive the ſacrament according to the uſage of the church of England, and make and ſubſcribe the declaration againſt tranſubſtantiation, and take and ſubſcribe the oath directed by ſtat. 18 Geo. 2. c. 20. in ſuch manner as by the ſaid act is directed; and alſo, being a deputy lieutenant or officer of the militia, ſhall, on or before the firſt day of Auguſt, 1764, leave his qualification in writing with the clerk of the peace, according

cording to ſtat. 2 Geo. 3. c. 20. entituled "An act to explain, amend, and reduce into one act of parliament, the ſeveral laws now in being, relating to the raiſing and training the militia within that part of Great Britain called England:" are hereby indemnified, and diſcharged, from all forfeitures, for any former neglect.

Chap. 32.

Chancery.

By ſect. 1. The court of Chancery is authorized to direct the placing out at intereſt, on government ſecurities, 5000*l.* of the caſh lying dead in the Bank, belonging to the ſuitors of the court, and to change the ſecurities as the court ſhall think proper.

By ſect. 2. The Bank is to receive the intereſt thereof, and to pay thereout, upon an order from the court 120*l.* *per annum* by quarterly payments, to the accomptant general's third clerk; the ſalary to commence from 8th of April, 1764, and to be in lieu of all fees. Reſidue of the intereſt to be accounted for as part of the general caſh belonging to the ſuitors, and to be applied purſuant to act 12 Geo. c. 33. intituled "An act for the relief of the ſuitors of the high court of Chancery."

By ſect. 3. If the whole or any part of the ſaid ſum of 5000*l.* ſhall be wanted to pay the ſuitors, the court may direct the calling in thereof.

Chap. 33.

Bankrupts.

By ſect. 1. Any ſingle creditor, or two or more creditors, being partners, whoſe debt or debts, ſhall amount to 100*l.* or upwards, and any two creditors, whoſe debts ſhall amount to 150*l.* or upwards, or any three or more creditors, whoſe debts ſhall amount to 200*l.* or upwards, of any merchant, banker, broker, factor, ſcrivener, or trader, within the deſcription of the bankruptcy act, having privilege of parliament, at any time, upon affidavit made and filed on record, in any court of Weſtminſter, by ſuch creditor, that ſuch debt is juſtly due to him, and that ſuch debtor, as he verily believes, is a merchant, &c. within the bankrupt acts, may ſue out ſummons, or an original bill and ſummons, againſt ſuch merchant, &c. and ſerve him with a copy thereof; and if ſuch merchant, &c. ſhall not within two months after perſonal ſervice (affidavit of the debt having been firſt duly made and filed) pay, ſecure, or compound for, ſuch debt to the ſatisfaction of ſuch creditor, or enter into a bond in ſuch ſum, and with two ſuch ſufficient ſureties, as any of the judges of that court, out of which ſuch ſummons ſhall iſſue, ſhall approve of, to pay ſuch ſum as ſhall be recovered, in ſuch action, together with ſuch coſts as ſhall be given in the ſame, he ſhall be adjudged a bankrupt from the time of the ſervice of ſuch ſummons; and any creditor may ſue out a commiſſion, and proceed thereon in like manner as againſt other bankrupts.

By ſect. 2. This act ſhall not extend to any debts contracted before the 8th day of March, 1764.

By

By ſect. 3. If any merchant, &c. ſhall after the laſt day of this ſeſſion of parliament, commit any act of bankruptcy, any creditor may ſue out a commiſſion; and the commiſſioners and other perſons *may proceed* thereon as againſt other bankrupts.

By ſect. 4. Nothing in this act ſhall ſubject any member of parliament to be arreſted, or impriſoned during the time of privilege, except in caſes made felony by the bankrupt acts.

OBSERVATIONS.

Why was this laſt clauſe added? for if a man becomes bankrupt he is no longer a member of parliament, unleſs a perſon who has neither real or perſonal eſtate can be ſaid to be duly qualified; ſee the qualifying acts, and page 165 of our laſt number.

The latter end of this clauſe ſeems ſomewhat extraordinary, viz. that a member of parliament ſhall not be arreſted, during the time of privilege, except in caſes made felony by the bankrupt acts. *What is the meaning of* "during the time of privilege", *if it means during the time the party continues a member, I ſay that when he becomes bankrupt he is no longer a member; if it means during the ſeſſion of parliament, or in other words during the time wherein you cannot proceed at all againſt a member, then I ſay that a member of parliament has no privilege at any time, in caſes of felony, whether the felony be made by the bankrupt, or by any other act; ſo that the above clauſe ſeems* better totally omitted.

Chap. 34.

Plantations.

By ſect. 1. After the firſt day of September, 1764, no act, order, reſolution, or vote of aſſembly, in any of the colonies or plantations in America, ſhall be made for iſſuing any paper bills, or bills of credit whatſoever, declaring the ſame to be legal tender in payment of money.

By ſect. 2. Every act, &c. in any of the ſaid colonies which ſhall be made to prolong the legal tender of any paper bills, &c. which are now ſubſiſting and current in any of the ſaid colonies beyond the times fixed for calling in, ſinking and diſcharging ſuch papers, bills, &c. ſhall be void.

By ſect. 3. If any governor ſhall aſſent to any ſuch act or order of aſſembly, he ſhall forfeit 1000*l.* be diſmiſſed, and incapacitated.

By ſect. 4. This act ſhall not alter or repeal 24 *Geo.* 2. *c.* 53. intituled "An act to regulate and reſtrain paper bills of credit in his majeſty's colonies or plantations of Rhode Iſland, and Providence plantations, Connecticut, the Maſſachuſets Bay, and New Hampſhire, in America, and to prevent the ſame being legal tenders in payments of money."

By ſect. 5. Nothing herein contained ſhall make any of the bills now ſubſiſting in any of the ſaid colonies a legal tender.

Chap.

Chap. 36.

Bankrupts and Hackney Coaches.

By ſect. 1. Stat. 5 Geo. 2. c. 30. intituled "An act to prevent the committing of frauds by bankrupts, is further continued to the 29th day of September, 1771."

By ſect 2. Every juſtice of the peace for the counties of Kent and Eſſex, ſhall have the ſame power and authority within his juriſdiction, to put the ſeveral laws (now in being for licencing and regulating the owners and drivers of hackney coaches, within the cities of London and Weſtminſter, and the ſuburbs thereof, and the pariſhes and places comprized within the weekly bills of mortality, whereby the ſaid drivers are ſubjected to certain penalties and puniſhments, for exactions or miſbehaviour) or any of them in execution againſt the ſaid drivers, for any offence committed againſt the ſaid laws, as the commiſſioners, for licencing hackney coaches, the aldermen of London, and the juſtices of peace of London, Weſtminſter, Middleſex, and Surry, now have by law within their reſpective juriſdictions.

Chap. 38.

Papiſts.

By ſect. 1. Deeds and wills made ſince the 29th day of September, 1717, from any papiſt to any proteſtant, though not inrolled, or not inrolled in due time, ſhall be good in law if inrolled on or before the firſt day of January, 1765.

Chap. 39.

Weſtminſter.

By ſect. 3. Stat. 2 Geo. 3. c. 21. requiring a report to be made by the ſurveyor, of any non-performance of contract, before the commiſſioners bring an action for the ſame, is repealed.

By ſect. 10. If any perſon ſhall for the future, run, drive, or draw, on any of the *foot pavements* of the ſquares, ſtreets, lanes, courts, alleys, yards, paſſages or places, to be paved by virtue of any act of parliament, any wheel, ſledge, wheelbarrow, *or any carriage whatſoever*, he ſhall forfeit for the firſt offence 10*s.* for the ſecond 20*s.* and for the third 40*s.*

OBSERVATION.

Or any carriage whatſoever; *this ſeems to include* chairs, *becauſe the act is here ſpeaking of the* foot pavements.

Anecdote concerning the famous lord chancellor Clarendon.

LORD Clarendon's zeal for the ancient liberties of England, was heightened by a domeſtic accident which happened to him. He, when he began to grow eminent in his profeſſion, came down to ſee his aged father, a gentleman of Wiltſhire; who, one day, as they were walking in the fiel l together told him, that men of his profeſſion did often *ſtretch law and prerogative, to the prejudice of the liberty of the ſubject, to recommend and advance them-*

themſelves: ſo he charged him if ever he grew to any eminence in his profeſſion, [for inſtance, attorney or ſolicitor general] that he ſhould never *ſacrifice the laws and liberties of his country to his own intereſt or to the will of a prince.* He repeated this twice; and he immediately fell into a fit of an apoplexy, of which he died in a few hours. *Burnet's hiſtory of his own times.* P. 159.

To the Editor of the General Magazine.

SIR,

THough I have not the leaſt connection with the name or family of lord chief juſtice Holt, yet my veneration for ſo eminent a perſon obligeth me to point out to you an unhappy miſtake, affecting his memory; in the monthly review for February laſt, and not corrected in that for March, under the articles of his life (p. 99.), is quoted as a curious anecdote a note, which among other things repreſents him (or ſome body) as indeed abandoned to luxury and vice; and this bad character is manifeſtly applied to the lord chief juſtice Holt; but the book of his life, whence it is tranſcribed, ſeems to me to intend that whole note of lord chief juſtice herbert, as appears by the mark of reference (°) being firſt ſet over that name, in the body of the page, and afterwards over the note at the bottom (ſee Page 4. of the life): but the truth is that the anecdote does not belong either to chief juſtice Holt, or chief juſtice Herbert, but to admiral Herbert, brother of the latter. Tindal's continuation of Rapin is quoted for it, vol. 3. (it ſhould be vol. 1.) P. 41. and by turning to that you will ſee that it cannot poſſibly be underſtood of any one but the admiral. Tindal borrows it almoſt *verbatim* from Burnet (hiſtory of his own times, vol. 1. P. 671 fol.) who likewiſe curſorily ſays of the admiral, when afterwards earl of Torrington, that he was a man of pleaſure. 2 Vol. P. 49.

I am perſuaded that you will not think it beneath your attention, as far as poſſible, to render juſtice to ſo reſpectable and ever renowned a character as that of lord chief juſtice Holt, which you will in ſome meaſure do by inſerting the above, the firſt opportunity in the law part of your Magazine, for thereby the readers of the chief juſtice's life, and of the ſaid monthly review, will be prevented from entertaining an improper opinion of either of the ſaid chiefs from the above miſtakes concerning them.

I am, Sir,
Your reader and admirer of the
Law part of your Magazine.

Inner Temple,
April 23, 1764.

PHILONOMOS

Obſervations

Obſervations on the three KINGDOMS *of* NATURE, *by Dr.* LINNÆUS. *Tranſlated from the* Latin.

1. IF we contemplate the works of GOD, it is more than ſufficiently manifeſt, that all living creatures are propagated from an egg, and that every egg produces an offſpring perfectly ſimilar to the parent. Hence no new Species are at this time produced.

2. Individuals are multiplied by generation. Hence (1) at this time the number of individuals is greater, in every ſpecies, than at firſt.

3. If we count this increaſe in every ſpecies backwards, in the manner we have multiplied them (2), the ſeries will finally terminate in *one ſingle Parent* whether that parent ſprung from one ſingle Hermaphrodite (which is commonly the caſe in Plants); or from two, male and female (as in moſt Animals).

4. Since there are no new ſpecies (1), like ever begetting its like (2), and unity taking the lead in every ſpecies (3); it neceſſarily follows, that we muſt attribute this primogenerative unity to ſome Omnipotent and Omniſcient Being, that is to GOD, whoſe work we call *Creation*: all this is conformed by the mechaniſm, laws, principles, conſtitutions and ſenſations of every living individual.

5. Individuals thus propagated, in their earlieſt and moſt tender age, are in a manner void of all knowledge, being obliged to learn every thing by the help of their external ſenſes; the conſiſtence of objects by the *Touch*; fluid particles by the *Taſte*; volatile ones by the *Smell*; the tremor of diſtant bodies by *Hearing*, and laſtly the figure of illuminated bodies by *Seeing*; which laſt ſenſe affects animals with far greater delight than either of the former.

6. If we take a ſurvey of the univerſe, three objects preſent themſelves to our view; 1. the very remote *Heavenly* bodies; 2. the fliting *Elements* that ſurround us; 3. fixed *Natural* bodies.

7. In this our Earth, only two of the three (6) are found, namely the conſtituting *Elements*, and the *Natural* bodies conſtructed out of theſe elements, by means, whether as to creation or generation, wholy inexplicable by us.

8. *Natural* bodies (7) fall more under our ſenſes (5) than all beſides; (6), being every where obvious to the ſenſes. I would aſk therefore, why the Creator placed man, endued with ſuch ſenſes (6) and underſtanding, on the globe of the earth, where nothing could exerciſe his ſenſes but *Natural* bodies (7) conſtructed by ſuch wonderful and ſtupendous mechaniſm? Could it be for any other end, than that the Obſerver ſhould admire and adore the artificer through his moſt beautiful work?

9. All things of uſe to man, are derived from theſe *Natural* bodies; hence *Mineral œconomy* or *Metallurgy*; *Vegetable œconomy* or *Agriculture* and *Horticulture*; *Animal œconomy*, or *Breeding of cattle*, *Hunting*, *Fiſhing*.

ing. In a word, *Natural Knowledge* is the foundation of all *Oeconomy*,* whether of Manufactures, Commerce, Diet, Medicine, &c. By it men are preſerved in a ſtate of health, ſecured from diſeaſes, and recovered from ſickneſs; ſo neceſſary it is to know how to make a proper choice of *Natural* bodies.

10. The firſt degree of wiſdom is to know things themſelves; which knowledge conſiſts in a true idea of objects; objects are diſtinguiſhed and known by a methodical *diviſion*, and an appropriate *denomination* of them; whence *Diviſion* and *Denomination* are the fundamentals of *Natural Science.*

11. Such who, in this Science, know not how to refer *Varieties* to their proper Species, *Species* to natural Genera, *Genera* to families, and yet ſet themſelves up for preceptors, both deceive and are deceived; for without ſuch knowledge it is impoſſible to erect a ſyſtem of Natural Science.

He only merits the Title of a *Naturaliſt* or natural Hiſtorian, who can accurately diſtinguiſh the parts of Natural Bodies at ſight (6), and deſcribe and name them with reſpect to number, poſition, and proportion: ſuch is a Lithologiſt, a Phytologiſt, or a Zoologiſt.

13. *Natural Science*, is the diviſion and denomination (10) of Natural bodies, inſtituted by the judgment of ſuch a Naturaliſt. (12)

14. Natural bodies are diſtributed into *Three Kingdoms of Nature:* the Lapidary, the Vegetable, and Animal.

15. *Stones* grow. *Vegetables* grow and live. *Animals* grow, live and think.

16. Many have ſpent their days in deſcribing and illuſtrating this Science; How much was known before our time, and what ſtill remains to be known, let the curious Inquirer judge.

17. I have exhibited a general view of the ſyſtem of Natural bodies, as it were in a map, wherein the reader may find how to purſue his journey through theſe extenſive regions.

18. My Method is new, and derived chiefly from autoptical obſervations; being thoroughly ſenſible how few I have yet met with in old authors, that are to be relied upon.

To the EDITORS *of the* GENERAL MAGAZINE.

Gentlemen,

THE following is an original tranſlation of a true ſtory from the Spaniſh; which, if you think proper to inſert, it is at your ſervice.

I am, gentlemen, your conſtant reader, J. S.

WHEN Veſpucius had conquered, with his little army, thoſe barbarous myriads, that lay along the great river Plate, which waters the fruitful country of Paraguay; he fancied the propereſt method to keep them

* *This the has author demonſtrated in the* Stockholm Tranſactions *for* 1740. page 411.

We ſhall hereafter entertain our readers with this celebrated Naturaliſt's Obſervations on the Three Kingdoms *ſeparately.*

them in ſubjection, was, not as his countrymen had done upon other occaſions, to extirpate whole nations in a day, and to deſtroy in order to reform: he took gentler methods, and attempted, by civility, humanity, and condeſcenſion, to make the neighbouring nations his friends. His deſign ſucceeded beyond expectation: ſeveral kings came to pay him a voluntary homage, and ſupplied his forces with all that was neceſſary for their ſubſiſtence. In this manner he lived for a conſiderable time, equally beloved by, and tender of the inhabitants; when ſome unexpected circumſtances calling him to Spain, he left Nunez, a man of rank in the army, commander of the fort he had built; with ſtrict injunctions however to uſe the Indians with the utmoſt kindneſs; and to expect returns rather from their gratitude than their fear. Theſe commands Nunez promiſed to obey, and for ſome time punctually fulfilled his engagements; but at length, growing weary of forced friendſhips, he deſired to imitate his countrymen, who, by barbarous methods, had brought almoſt the whole continent under the Spaniſh yoke. He therefore began by treating one of the principal neighbouring kings with indignity, ordering him for ſome very ſlight offence to be whipt through the garriſon, which conſiſted of two hundred men.

The Indian bore this treatment with the utmoſt diſſimulation, and ſtill pretended the ſame friendſhip for his Spaniſh maſters, that he always ſeemed to poſſeſs. In his heart, however, he meditated nothing but revenge, and ſought every opportunity to execute his vindictive reſolutions. The Spaniards were ſupplied every day with freſh proviſions by the neighbouring Indians, and among the reſt, this king was remarkably aſſiduous in providing every thing that might contribute to their entertainment, and ſupport; theſe preſents were ſeldom received without ſome return from the Spaniſh garriſon, who, when they had no other equivalent to beſtow, generally kept the Indians to drink.

It happened that Hernandez, ſecond in command under the deputy-governor, was ſent out into the country with an hundred and fifty men, in order to procure proviſions, and repel a threatened invaſion; this was the opportunity the Indian king had ſo long wiſhed for. Accordingly, ſelecting out twelve of his captains, the moſt reſolute, and the moſt faithful in all his dominions, he diſguiſed himſelf and them as peaſants, and being loaded with freſh proviſions, and every delicacy which that rich and fruitful country could afford, they made up to the Spaniſh garriſon. The Spaniards, who had for ſome days before felt all the pains of hunger, admitted them into the fort; with gratitude and eagerneſs the proviſions were devoured by the ſoldiers, and the Indians were intreated to ſtay the night, and partake of that joy which they had ſo generouſly contributed to promote. This was what the wily king had expected, he therefore, with ſeeming reluctance, accepted the invitation, and joined in the revel which the ſoldiers had prepared.

It was midnight, and the glaſs flew round with the utmoſt feſtivity, and drunkenneſs had now began to baniſh all ſuſpicion, when the king himſelf flew to the battlement, and gave the ſignal to five hundred of his troops, who were poſted in ambuſh, to enter as ſoon as the gates ſhould be open from within. Accordingly, the Indians from without, ruſhing into the garriſon, all was inſtantly carnage, cruelty and deſpair; the Spaniards were maſſacred without mercy, and the whole fort was laid under

a deluge of blood; not one perſon out of fifty eſcaped, except Marina alone, the wife of Hernandez, the abſent commander, and ſhe was only reſerved for a worſe fate, for her life was ſpared in order to ſatisfy the brutal deſires of her barbarous conqueror, who had been long her concealed admirer. Marina was juſt nineteen, and had been married but the year before to Hernandez, ſhe was one of the moſt beautiful women in Spain, and of the firſt family in the whole kingdom; Hernandez, alſo, was nephew to the duke of Lerma, and went to the Indies, rather to make obſervations on the country as a ſcholar, than with the avaricious ſpirit of an adventurer. Marina loved him with the tendereſt paſſion, and upon his going to America, could by no entreaties be prevailed upon to ſtay behind; with him ſhe endured all the dangers of an unknown ocean, all the terrors of a treacherous enemy, and her aſſiduity ſoftened every inconvenience on the way; ſuch was their mutual conſtancy and affection, that the ſoldiers looked upon both with admiration and compaſſionate eſteem.

The ſurprize of Hernandez upon his return to the fort needs no heightening from fancy; he felt for his countrymen, his habitation, and his commander; but the loſs of his dear Marina, filled him with inexpreſſible anguiſh. No longer maſter of reflection, or able to conduct himſelf with his former prudence, he reſigned his command, and unarmed, and unattended, ventered himſelf into the Indian country, in order to ſoften, if poſſible, the king, who owed him ſeveral obligations, and whom he had once protected from the fury of the Spaniſh garriſon. Upon his arrival at the Indian tent, he ſoon found the treatment his wife was likely to undergo; he found the barbarous monarch juſt ready to take by force what Marina had refuſed to grant, and was juſt time enough to prevent his brutal intentions. The king, enraged at his diſappointment, but more at his diſturber, ordered Hernandez to immediate execution; the captains of war were aſſembled, every one prepared to execute their orders, and the undaunted Spaniard, was placed in the midſt ready to receive his fate with the fortitude, becoming a ſoldier.

Marina bathed in tears fell at the feet of the king, entreated the ſhorteſt reſpite for her huſband, and promiſed a more eaſy compliance. The eaſy fruition of his deſires induced her brutal raviſher to ſuſpend, for a while, the ſentence, and to make the obligation the greater, ordered Hernandez to be ſet at liberty, but upon condition only, that he ſhould not ſpeak to his wife under pain of immediate execution.

This injunction he promiſed punctually to fulfil, and continued for a week in the Indian court, without once ſpeaking to the dear object of his deſires. But alas! who can control his ſtronger and moſt ruling paſſion. Our young ſoldier could no longer refrain from letting looſe all the agonies of his heart before her; as ſhe was going from her tent he met her, and throwing himſelf at her feet with a tranſport which he could not ſuppreſs, he burſt into a flood of tears. As ſhe was never yet permitted to go any where unattended, her guards quickly gave the king information that their late priſoner had diſobeyed his injunctions, and brought him to the very ſcene where our lovers were indulging their ſorrows, as they vainly imagined, unſeen. To controul his paſſions is a taſk the ſavage had never learned, he therefore flew out into the moſt ungovernable rage, and revoking his former ſentence, ordered both to be put to death without farther delay; thus at once reſolving to rid himſelf of his uneaſineſs,

by

by deſpair. The terrors of an Indian execution are inconceiveable almoſt, to all but thoſe who have been witneſſes to ſuch ſcenes of horror. Imagine a fire prepared to burn the wretched priſoners piece-meal, the women themſelves joining in this ſcene of cruelty, and aggravating all the pains of death with the moſt ingenious malice; imagine this, I ſay, and ſee the two innocent victims led out in order to feel it all. The dreadful death-cry was raiſed, the flinty ſword was prepared, and all was ready to be put in execution. Our two lovers, locked in each others arms, every moment awaited death with intrepidity and reſignation; when a diſtant war-whoop cauſed the meditated tortures to be for a while ſuſpended. They now perceived the Indians begin to fly on every ſide, and a body of Spaniſh horſe burſting through a neighbouring foreſt, and flying towards the place where they were found bound together. The tranſport of the delivered and the deliverers is paſt deſcription: Hernandez, imprinting a kiſs upon the lips of his fainting Wife, left her to the care of his attendants, and mounting an horſe which was brought him, purſued the fugitive Indians. He ſoon came up to that body of the enemy which was headed by the king himſelf; and revenge giving him at once both ſtrength and courage, he fell upon the barbarous betrayer, and while all his attendants endeavoured each to ſave himſelf by flight, Hernandez, at one blow, cut off his head, and returned in triumph to repair the fort which had lately been deſtroyed. He, and his dear Marina, ſoon after embarked for Spain, where the king rewarded the bravery and fidelity of both with all the riches and honours that majeſty could beſtow.

A table by the late *Martin Folkes*, Eſq; Preſident of the Royal Society, exhibiting the ſtandard of our ſilver money, as to goodneſs, with the true weight of 240 pennies, 60 groats, 20 ſhillings, or a pound ſterling in tale, as alſo the intrinſic value of ſo much ſilver as was contained in the ſame, at the ſeveral times noted in the firſt column, with the ſame value expreſſed in decimals of our preſent ſterling pound: whereby the proportion may immediately be known, of any former nominal ſum of money, to the intrinſic value of ſo much money, as is now called by the ſame appellation.

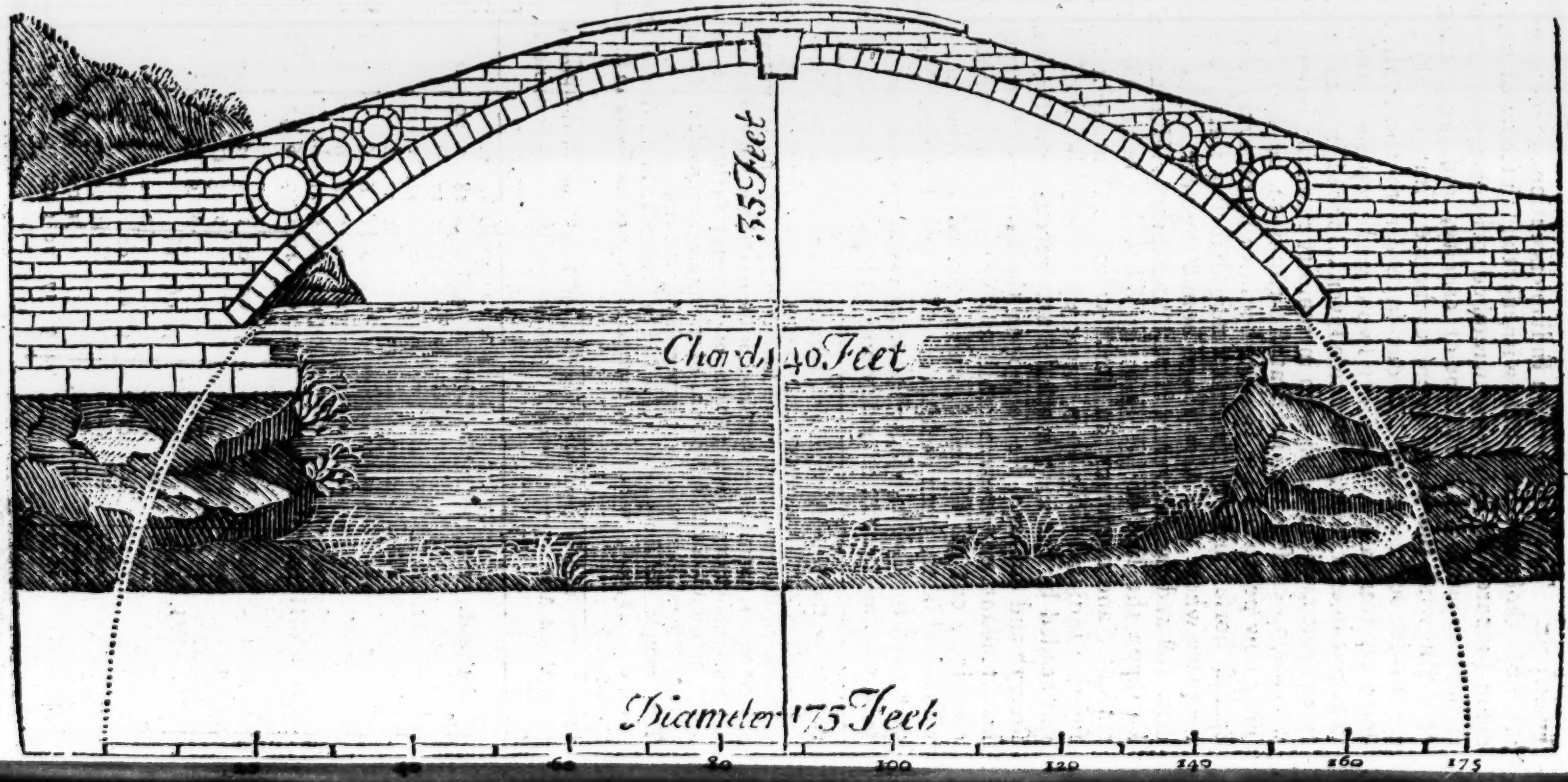
For Example. Saliſbury cathedral is ſaid to have coſt, in the time of Henry III. 42,000 marcs or 28,000l, which ſum multiplied by 2.906 anſwers to 81368l. of our preſent money.

Year of the king's reign and A D.		Standard of the ſilver.	Wt. of XX ſh. in tale.			Value of the ſame in preſent money.			Proportion.	Price of fine gold in the Engl. coin.
			oz.	dwt.	gr	l.	s.	d.		
Conqueſt.	1066	Old Sterl. or	11	05	00	2	18	1 2q.	2.906	From 1353 to 1603
28 Edw. I.	1300	ſilver eleven	11	02	05	2	17	5	2.871	fine gold was va
18 Edw. III.	1344	ounces two	10	03	00	2	12	5 19.	2.622	lued at about 11
20 Same.	1346	penny weight	10	00	00	2	11	8	2.583	times the Price of
27 Same.	1351	in the pound	9	00	00	2	6	6	2.325	fine ſilver: or it
13 Hen. IV.	1412	fine, to eigh-	7	10	00	1	18	9	1.937	was worth, of our
4 Edw. IV	1464	teen penny	6	00	00	1	11	0	1.55	preſent money by
18 Hen. VIII.	1527	weight alloy.	5	06	16	1	7	6 3q.	1.378	the ounce Troy
		oz. dwt.								nearly 3l. 1s. 6d.
34 Same.	1543	W. 1 2	5	00	00	1	3	3 1q.	1.163	In 1604 it was va-
36 Same.	1545	W. 5 2				0	13	11 2q.	0.698	lued by the ounce
37 Same.	1546	W. 7 2				0	9	3 3q.	0.466	at 3 7 6
3 Edw VI.	1549	W. 5 2	3	06	16					1620 3 14 6
5 Same.	1551	W. 8 2				0	4	7 3q.	0.232	1663 4 0 10
6 Same.	1552	W. 0 1	4	00	00	1	00	6 3q	1.028	1717 4 5 0
1 Mary.	1553	W. 0 2				1	00	5 3q.	1.024	An ounce Troy
2 Eliz.	156	Old ſterl.				1	00	8	1.033	of fine ſilver is
43 Same.	1601		3	17	10	1	00	0	1.000	now worth near-
										ly 5s. 7d. 1748.

W. 10z. 2dwt. &c. ſignifies 10z. 2dwt. &c. in the pound of Troy worſe than old ſterling, or ſtandard ſilver.

A curious BRIDGE *in* WALES, *of one* ARCH,

THE bridge thrown over the river *Taaf*, at *Lantriſſent*, near *Landaff*, in the county of *Glamorgan*, is one of the moſt extraordinary performances in architecture, that, perhaps, has ever appeared; and the more ſo as it is the work of one *William Edwards*, an illiterate *Welchman*, well *inſpired*, we may ſuppoſe, with a mechanical genius: it is thrown from one hill to another: its dimenſions as appear in the plan: the coſt 700l. only: he built it twice, becauſe, at firſt, the butments gave way: which he prevented for the future, by the circular arch he made. But what is more ſuprizing ſtill, is the breadth of it, which is no more than eight feet, as in that country, diſtant from the capital, the number of carriages are not ſo many. It is aſtoniſhing to ſee how a bridge of ſtone, of ſo narrow a breadth, could be thrown from one mountain to another: the diameter of the circle is one hundred and ſeventy-five feet: the chord of the arch is one hundred and forty feet: the altitude from the chord to the arch is thirty-five feet. This bridge is called in *Welſh Pont y ddy Prydd*, and is undoubtedly well worthy the attention of the curious traveller and architect.



MATHEMATICAL CORRESPONDENCE.

Queſt. 11. *anſwered by Mr.* T. Walker.

PUT radius $= 1$; ſine of the greater arc $= s$; then its co-ſine $= \sqrt{1 - s^2}$; and the co-ſine of double that arc $= 1 - 2s$; alſo, the co-ſine of 4 times that arc $= 4s^4 + 4s^3 - 4s^2 - 4s + 1$.

Put $2x =$ ſubtenſe of the leſſer arc, then will $x =$ the ſine thereof, and $\sqrt{-4x^2} \times 2x + 4x = 6x - 8x^3 =$ ſubtenſe of three times that arc, (by Handſon's Trigonometria, page 40). Therefore $3x - 4x^3 =$ the ſine thereof. But $sx = a$, per queſtion, $\therefore x = \frac{a}{s}$ and $x^3 = \frac{a^3}{s^3}$, $\therefore \frac{3a}{s} - \frac{4a^3}{s^3} = 3x - 4x^3$; whence, $\frac{\frac{3a}{s} - \frac{4a^3}{s^3}}{\sqrt{4s^4 + 4s^3 - 4s^2 - 4s + 1}} =$ a maximum, per queſtion. Fluxed and properly reduced the reſpective values become known.

This Queſtion was alſo ſolved by Meſſrs. Waugh, Dalby, Smith, Barns, *and* Barker.

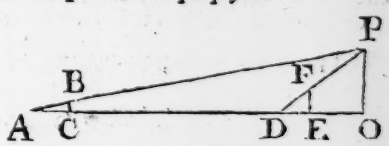
Queſt. 12, *anſwered by Mr.* G. Cetii.

PUT $a = 16\frac{1}{2}$, $b = 1142$, and $x =$ the time the body will continue in motion: then will $7 - x$ expreſs the time the ſound is returning; and ſince chords of the ſame circle are deſcribed by deſcending bodies in equal times, we ſhall have, per queſt, $\frac{axx}{2} =$ the ſpace deſcribed in the time x, $= 7b - bx$; and by compleating the ſquare, &c. we get $x = 6{,}6854$, whence the diſtance of the ſtone from the top of the hill $= 359{,}3$ feet, and the ſound will return in $0''\ 18'''\ 8''''$.

Meſſrs. Dalby, Sadler, Smith, Barker, Hyde, *and* Barns, *likewiſe ſolved this queſtion.*

Queſt. 13. *anſwered by Mr.* John Thompſon, *the propoſer.*

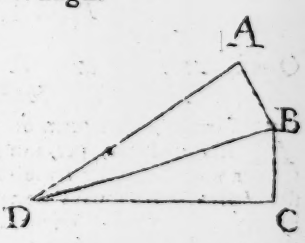
PUT $AB = DF = 100 = a$, $AC = 100 - 2 = 98 = c$, $DE = 100 - 20 = 80 = d$, $AD = 640 = b$, and $DO = x$. Then (per 47 E. 1.) $\sqrt{a^2 - c^2} = BC$, alſo $\sqrt{a^2 - a^2} = FE$; and (per ſimilar triangles) $c : \sqrt{a^2 - c^2} :: b + x : PO$, and $d : \sqrt{a^2 - d^2} :: x : PO$; therefore $\frac{x\sqrt{a^2 - d^2}}{d} = \frac{\sqrt{a^2 - c^2} \times b + x}{c}$ out of fractions, &c. $xc\sqrt{a^2 - d^2} - xd\sqrt{a^2 - c^2} = bd\sqrt{a^2 - c^2}$; $\therefore x = \frac{bd\sqrt{a^2 - c^2}}{c\sqrt{a^2 - d^2} - d\sqrt{a^2 - c^2}} = 2$ chains 37 links. And (per ſimilar triangles) $d : \frac{bd\sqrt{a^2 - c^2}}{c\sqrt{a^2 - d^2} - d\sqrt{a^2 - c^2}} :: \sqrt{a^2 - d^2} : PO = \frac{b\sqrt{a^2 - c^2} \times \sqrt{a^2 - d^2}}{c\sqrt{a^2 - d^2} - d\sqrt{a^2 - c^2}} = 178$, which added to the height of the inſtrument gives the mouniain's height.



In the ſame manner, nearly, this queſtion was ſolved by Mr. G. Cetii, *Mr.* T. Barker, *and Mr.* B. Rotherham.

Queſt. 14. *anſwered by Mr.* David Waugh.

PUT $AB + DC = 54.3104 = s$. $DB = \sqrt{1796} = d$, m and $n =$ ſine and co-ſine $\angle CDE = 36° 52' 12''$, $p =$ ſine $\angle DAB = 116° 33' 54''$, per queſt. x and $y =$ ſine and co-ſine $\angle CDB$. Then will $my - nx =$ ſine $\angle BDA$, and per trigonometry $p : d :: my - nx : AB = \frac{d}{p} \times my - nx$; and as radius $1 : d :: y : DC = dy$; $\therefore dy + \frac{d}{p} \times my - nx = s$, and $p + m \times y - nx =$



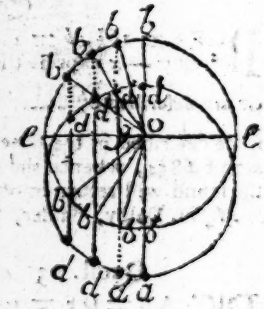
$\frac{p^s}{d}$ or $ry - nx = b$. Put $\frac{2t}{1+t^2} = x$, and $\frac{1-t^2}{1+t^2} = y$, then will $t^2 + \frac{2n}{r+b}t = \frac{r-b}{r+b}$, $\therefore t = .1722042$, answering to the natural tangent of 9° 46′ 14″ 41‴, and 19° 32′ 29″ 22‴ = CDB: then will CB = 14.1754, CD = 39.93817, AB = 14.37223, and AD = 34.77239, from whence the area may be found, but time will not permit.

Messrs. Walker, Barker, *and* Dalby, *also answered this question.*

N. B. *Mr.* David Waugh *informs us, that Mr.* G. Brown, *(of Portsmouth Common,) shewed him a copy of the question which he sent us, which, it seems, had not the least affinity with that which was printed in our last magazine under his name: All that we shall say to this at present is, that Mr.* Brown *sent us only one question, which we are ready to produce in his own hand writing.*

Quest. 15, *answered by Mr.* T. Todd, *the proposer.*

Suppose $ob = r$ the length of the rod, revolving round the end o, as a center; $bd = n$, the length of the string, which will every where be perpendicular to the horizon; and draw bg indefinitely near, and parallel to ob, putting $go = x$; then will $gd = \overline{r^2 - x^2}^{\frac{1}{2}} - n$, and consequently $\dot{x}\sqrt{r^2 - x^2} - n\dot{x}$, is the fluxion of the area $gddo$; whose fluent, is the circular seg. $gbbo - nx$ = the area itself: and, by a similar process, the area of the space $gdao$, is equal to the circular seg. $gbbo + nx$, whose sum is equal to twice the circular seg. $gbbo$ = the area of the part $ddda$; and therefore, 'tis evident that the weight d, will describe a circle, equal to the circle described by b, the end of the rod.



Corollary. The area of the space $ddbb$, is $= nx = bd \times go$.

This question was likewise answered by Mr. T. Walker, *Mr.* T. Barker, *and Mr.* G. Cetii.

Scholium to Mr. Todd's *solution of Quest.* 5.

THE strength of the props is supposed to be just equal to the pressure they sustain, and this pressure, is only to be considered in the point o, in two directions, which may be less than the absolute weight of the body, equal thereto, or considerably greater; and that point, and elevation, when it is a maximum, I have given at page 1122 of Martin's Miscellaneous Correspondence.

T. Todd.

*** *As our ingenious friend Mr.* D. Waugh, *of Portsmouth, seems to be very much pleased with the 16th question, but complains, that the time allowed for considering it is too short, we hope we shall not offend those ingenious gentlemen (Messrs.* Walker, Cetii, *and* Todd,) *who have already sent solutions to it, if we defer printing them for two months longer, as we should be extremely glad to be favoured with Mr.* Waugh's *solution, and which we promise to print verbatim.* ——— N. B. *There is a mistake in the signature of this question, instead of the Rev. Mr.* S——, *it should have been the Rev. Dr.* S——.

New Questions *to be answered.*

Quest. 21. *By Mr.* T. Sadler, *of Newhall in Cheshire.*

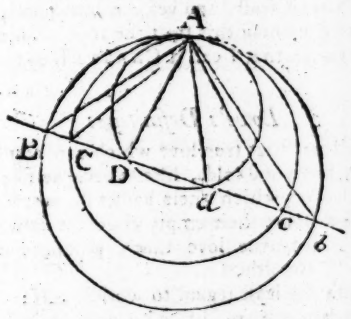
A Farmer hath a term of 30 years in an estate of 40l. per annum: Now the farmer may hold the same estate in possession, provided he pays down 200l. ready money, for 20 years longer, in all 50 years. Query the rate of interest?

Quest. 22. *By Mr.* Jaques Husband, *of Newbold, in Leicestershire.*

GIven, in a right angled triangle, the nearest distance of the right angle from the periphery of the inscribed circle = 8, and the length of a right line drawn from the base through the centre of the said inscribed circle, parallel to the perpendicular,

lar, and terminating in the hypothenuſe = 20.625. Query, the ſides?

Queſt. 23. *By Mr.* Edward Nott, *of Stamford.*



IF three or more circles have the ſame tangent at A, and if a line be any how drawn, cutting all the circles, or only touching the leaſt and cutting all the reſt; then from the point of contact A to the ſeveral interſections, the lines AB, AC, AD, A*b*, A*c*, A*d*, &c. being drawn, the angles BAC, CAD, &c. will be reſpectively equal to the angles *b*A*c*, *c*A*d*, &c. A demonſtration of this is required?

Queſt. 24. *By Mr.* Edward Smith, *of Baldock, in Hertfordſhire.*

IT is required to find the nature, area, and ſolidity of a ſolid, made by the rotation of the ſemi-curve ſpace about its axis; of the curve whoſe abſciſſa is the ſame as the abſciſſa of the greateſt parabola inſcribed in a circle; and ordinate, the difference between the ordinate of the circumſcribing circle, and the ordinate of the inſcribed parabola.

Queſt. 25. *By Mr.* John Clarke, *of Lincoln.*

GIven the fluxionary equation $\frac{b\ddot{y}}{\dot{y}^2} = \frac{a}{a+x}$; required the value of y in terms of x, without the help of infinite ſeries, ſuppoſing $\dot{x} = 1$.

Queſt. 26. *By Mr.* T. Allen, *of Spalding, in Lincolnſhire.*

TO find the length of the *elaſtic curve*, whoſe equation is $y^4\dot{y}^2 + y^4x^2 - a^4\dot{x}^2 = 0$, when $y = a$, by means of circular and elliptic arcs.

Aſtronomical Admonitions for June.

June 1. *Mars* in oppoſition to the *Sun*, ſoon after noon, and may, at night, by a Micrometer and a Pendulum Clock, be compared with the 26th Star of *Serpentarius* in *Flamſteed*'s *Britiſh Catalogue*, to which he is near; or with θ a Star of the 3d Magnitude in the ſame conſtellation, which follows him nearly in his Parallel, at the diſtance of about half an hour. —— *Mercury* may be ſeen weſt of the Moon this evening, ſhe having been in conjunction with him a little after Noon.

7. *Venus* will be at her greateſt eaſtern Elongation from the *Sun*, and will ſet almoſt two hours and an half after him. She may now, and for ſeveral days to come, be ſeen by the naked Eye moſt part of the day.

9. The *Moon* will eclipſe *Spica Virginis*; but the Star will emerge about two hours and a half before ſun-ſet, and conſequently be inviſible.

The *Satellites* of *Jupiter* cannot be obſerved all this month, he being too near the Sun, with which he will be in conjunction on the 19th.

POETRY.

May eve's invitation. A new ſong.

I.

THE ſun has hid his luſt'ring head behind
yon neighbouring hill,
The ſhepherd tunes his homely pipe beſide the
limpid rill,
The plowman, with his ruſtic ſports, beguiles
th' lab'rous day,
Then come, Paſtora, come and taſte the ſweets
of blooming May.

II.

Behold, with native innocence, the ſylvan
nymphs advance,
With joy impatient, o'er the lawn, to join the
rural dance,
More chaſte than Luna, queen of night, beneath whoſe lamp they play;
Then come, Paſtora, come and ſhare the joys
of blooming May.

III.

The ſwains poſſeſſing balmy health to invigorate love's flame,
Unknown is ev'ry fulſome vice that ſhakes the
human frame,
But ruddy as the orient beams that gilds the
riſing day.
Then come, Paſtora, come and ſhare the joys
of blooming May.

IV.

Here peace has fix'd his bleſs'd abode, and truth triumphant reigns,
No baſe deceivers perjured tongue does e'er pollute theſe plains,
No artful lures or gaudy dreſs to draw your hearts aſtray.
Then come, Paſtora, come and ſhare the joys of blooming may.

Blackman-ſtreet. J. H.

To a friend.

——— *Nec trepides in uſum*
Poſcentis ævi pauca. HOR.

FOrbear, my friend, forbear to call
Happy that man whoſe fortune's great;
Nor think that bliſs attends on all
That wallow in a large eſtate.
Look round, and happineſs you'll find,
Oft' to the humble cot aſſign'd.

Health don't with riches only dwell;
Nor, when diſtemper racks your frame,
Will gold the tort'ring pains expel,
Or ought relieve the fever's flame.
Will all the treaſures of the weſt
Sooth and compoſe the troubled breaſt?

Why then, ſince bounteous providence
Hath kindly all thy wants ſupply'd;
Hath given you a competence ——
Why are you ſtill unſatisfy'd?
Why ſeek you to augment your ſtore?
You have enough; what can you more?

And ſhould you all your coffers fill,
Nay, ſhould you all the Indies gain;
Yet your abſurd, unbounded will
Could not from ſord'd pelf abſtain.
To other Indies you'd aſpire,
Not worlds could ſate your ſtrong deſire.

When dropſies drear the ſoul torment,
Water is all in vain apply'd;
It can't with rivers be content,
Nor e'en with oceans ſatisfy'd:
So in gold ſtreams is av'rice curſt,
To burn with an eternal thirſt.

Cambridge, May 8, 1764. D. R.

Love's Original.

LOVE is a cyon cropt from virtue's tree,
And graſted in the ſtock of purity,
Planted at firſt in nature's choiceſt ſoil,
Before the *fiend* did nature's beauty ſpoil;
But thence tranſplanted to a richer ground
Than can in all dame Nature's realm be found;
Where, being well manur'd, it takes deep root
Downward, and branches, upward, forth doth ſhoot;
The ſap which doth this ſtately tree maintain
Is ſympathy, which runs, as in a vein,
Through ev'ry branch, cauſing it firſt to ſprout
Awhile before young tender buds ſpring out.
Nor is it barren, but much fruit doth bear,
To taſte moſt pleaſing, and to ſight moſt fair,
A ſound ſubſtantial fruit, that can endure
The ſharpeſt froſt, and yet continue pure;
And that ye may this fruit the more admire,
Take notice that I call it CHASTE DESIRE.

T. E.

Love's Definition.

I Call not that true love which can admit
Of heats and colds, like to an ague fit;
Thoſe rivers which their banks do overflow,
In a few hours their empty channels ſhow.
That's not true love that's grounded upon wealth,
Or hath the leaſt regard to worldly pelf;
For ſuch a one, might he his end obtain,
Would proſtitute his very wife for gain.
Nor can he with true lovers have a place,
Whoſe love depends upon ſome pretty face,
Which age or ſickneſs having once defac'd,
The very ground-work of his love is ras'd.
And ſince that ſordid thing ſelf-intereſt
Is able to defile the chaſteſt breaſt,
If not prevented, therefore I declare,
That it and true love inconſiſtent are.

Such marks as theſe, I could add many more,
Like watch-tow'rs, tending to forewarn the jolly,
But young, unſkilful mariners, before
They ſplit their veſſels on the rocks of folly.

But for this theme let this ſuffice; while I,
Tir'd with the ſubject, borrow wings and fly
Into a higher orb, where I may view
That love whoſe choiceſt epithet is, TRUE.
That I call love, that only love I call,
Whoſe birth appears to be cœleſtial;
That, and that only I account true love,
Which in the ſphere of chaſtity doth move.

He's a true lover [not who can ſubdue
Monſters and giants, for his miſtreſs' ſake,
And ſigh, perhaps and weep, (with much-a-do,)
For fear ſhe ſhould ſome other happy make.
But] who ſo far her happineſs prefers
Before his own, that he can be content
To ſacrifice his own to purchaſe hers,
Tho' with the price of his own baniſhment.

A ſincere lover wholly doth devote
Himſelf to make her happy whom he loves,
And doth, with might and main, her good promote,
Altho' deſtructive to his hope it proves,

He that loves truly loves to that degree
(Whatever notions debauchees may ſpread)
That he could be content, yea joy to ſee,
His darling bleſs ſome worthier perſon's bed.

Nor

Nor can true love to hatred ever turn,
Altho' it never ſhould acceptance find,
But like a lamp clear to the laſt would burn,
And thereby manifeſt a noble mind.

Such Amnon's motions, then conclude we muſt,
How ſpeciouſly ſoever they are deckt,
Proceed not from true love, but filthy luſt,
Which all chaſte breaſts ſhould ſtudy to reject.

T. E.

A Rebus.

A Kingdom, renown'd for its valor, and pow'r;
A fruit in requeſt for its juice, which is ſour;
A part in the head of a globular form;
A genius who once did his country adorn;
A bird fam'd for ſinging remarkably fine;
A city where learning and eloquence ſhine;
A ſtriking appearance oft ſeen in the rain;
What all men hereafter wou'd wiſh to obtain;
A thing us'd for ſafety in croſſing the main;
A token of marriage preſented in ſight;
What frequently happens proceeding a fight;
A liquid much uſeful in friendſhip's connection;
A fence by which England enjoys her protection.
Th' initials, if rightly you join, will declare,
The name of a lovely, and amiable fair,
Whoſe ſenſe, and good temper, conſpicuous appear.

A. Z.

Rebus by Mr. Sadler.

WHAT Damon and Chloe, do form in the May,
When buſy at labour, amongſt the new hay,
Then add, if you pleaſe, next one fourth of old Care,
With letter the nineteenth, will point out a fair,
Whoſe wit's ſo inviting, and pleaſing her charms,
That Strephon, declares he could die in her arms.

Another Rebus by Mr. Sadler.

ONE fifth of the Nabob, brave Clive did ſubdue,
Two fifths of the weapon againſt them he drew;
To this add a title revers'd, and you'll find,
The name of a laſs, who is charming and kind.

Anſwer to the Rebus in April magazine, propoſed by Mr. Clarke.

IF a Dove thus be join'd
With half Er, Judah's ſon,
I'm certain you'll find
That Dover is the town.

Robert Neſſen.

Anſwer to the ſame, by Mr. J. W.

ON reading your rebus but once or twice over,
I gueſs'd by your hints, it was certainly Dover,
Cou'd any more *ſwift* the ſolution diſcover.

Alton, May 10, 1764.

The ſame anſwered by Mr. Iſaac Dalby.

FRiend Clarke, when I your rebus had read over,
The ſea-port town you meant, I found was Dover.

D. B. *has ſent us four epitaphs in a letter dated from Spittlefields; but they are ſo imperfect in both compoſition and merit, that we muſt beg to be excuſed inſerting them.*

The poem entitled FLORALIA *is under conſideration; as is alſo that entitled* The BLEATING SHEEP: *but they are both ſo long that we are afraid we cannot yet oblige the author, and that at laſt we ſhall be under the neceſſity of making abbreviations.*

The ode TO SUCH AS STAND IDLE IN THE MARKET-PLACE, *ſhall be inſerted.*

Mr. John Buddle's favour is received, and a copper-plate ſhall be neatly engraved from his drawing and inſerted, with the deſcription, in our next.

Mr. Bampfield, we hope, will excuſe us as we have already declared our intentions of not entering into controverſy, our plan being to entertain and improve

The verſes to Mr. John Sykes, of Liverpool, ſhall have a place; and we ſhall be glad of the author's future correſpondence.

The Rebus from Shooter's-hill ſhall have a place.

In anſwer to A. B.*'s queſtion, we ſhall, with pleaſure, engrave any curious piece of antiquity, any view, inſtrument, or invention, which our correſpondents are pleaſed to ſend us; reſerving to ourſelves the liberty only of judging of thoſe that are moſt proper.*

Several other letters are received which ſhall be taken notice of as faſt as poſſible. We take this opportunity of returning our ſincere thanks to all our good friends and correſpondents; and to aſſure them, that we ſhall conſtantly endeavour to deſerve a continuance of their favours and protection.

A Candid Review *of* New Books.

ART I. THE *Candidate. A poem. By Mr. Churchill.* 4to. 2s. 6d.

The title of this poem is taken from a very ſatyrical print that was privately handed about, but never publiſhed, a few days previous to the late conteſt at Cambridge, and was called the CANDIDATE. The chief figure in the print, and the hero of this poem, are the ſame perſon; who he is we need not inform our readers, when they recollect who were the late candidates at Cambridge. One thing Mr. Churchill ſeems to have forgot: in his advertiſements previous to the publication, he ſaid it was inſcribed to the right hon. the earl of Sandwich, one of his majeſty's principal ſecretaries of ſtate; but we ſee nothing of it in the book. He ſets out with ſaying enough of actors, authors, critics, &c. and in the catalogue, mentions *himſelf* in the following admirable lines.

Enough of *ſelf*—that darling luſcious theme,
O'er which philoſophers in raptures dream;
On which with ſeeming diſregard they write,
Then prizing moſt, when moſt they ſeem to ſlight;
Vain proof of folly tinctur'd ſtrong with pride!
What man can from himſelf himſelf divide?
For me (nor dare I lie) my leading aim,
(Conſcience firſt ſatisfied) is love of fame,
Some little fame deriv'd from ſome brave few,
Who, prizing honour, prize her vot'ries too.
Let all (nor ſhall reſentment fluſh my cheek)
Who know me well, what they know, freely ſpeak,
So thoſe (the greateſt curſe I meet below)
Who know me not, may not pretend to know.
Let none of thoſe, whom bleſs'd with parts above
My feeble genius, ſtill I dare to love,
Doing more miſchief than a thouſand foes,
Poſthumous nonſenſe to the world expoſe,
And call it mine, for mine though never known,
Or which, if mine, I living bluſh'd to own.
Know all the world, no greedy heir ſhall find,
Die when I will, one couplet left behind.
Let not of thoſe, whom I deſpiſe though great,
Pretending friendſhip to give malice weight,
Publiſh my life; let no falſe ſneaking peer
(Some ſuch there are) to win the public ear,
Hand me to ſhame with ſome vile anecdote,
Nor foul-gall'd biſhop damn me with a note.
Let one poor ſprig of bay around my head
Bloom whilſt I live, and point me out when dead;
Let it (may Heav'n indulgent grant that pray'r)
Be planted on my grave, nor wither there;
And when, on travel bound, ſome rhiming gueſt
Roams through the Church yard, whilſt his dinner's dreſs'd,
Let it hold up this comment to his eyes;
Life to the laſt enjoy'd, *here* Churchill lies;
Whilſt (O, what joy that pleaſing flatt'ry gives)
Reading my works, he cries—*here* Churchill lives.

He then invokes *panegyrick* and proceeds in an ironical manner thus,

What patron ſhall I chuſe? ſhall public voice,
Or private knowledge influence my choice?
Shall I prefer the grand retreat of *Stowe*,
Or, ſeeking patriots, to friend *Wildman*'s go?
To *Wildman*'s, cried *Diſcretion* (who had heard
Cloſe-ſtanding at my elbow, ev'ry word)
To *Wildman*'s! art thou mad? can'ſt thou be ſure
One moment there to have thy head ſecure?

Are

Are they not all (let obſervation tell)
All mak'd in characters as black as Hell,
In *Doomſday* book by miniſters ſet down,
Who ſtile their pride the honour of the crown?
Make no reply—let Reaſon ſtand aloof —
Preſumptions here muſt paſs as ſolemn proof.
Peace, good *Diſcretion*, peace—thy fears are vain;
Ne'er will I herd with *Wildman*'s factious train,
Never the vengeance of the great incur,
Nor, without might, againſt the mighty ſtir.
If, from long proof, my temper you diſtruſt,
Weigh my profeſſion, to my gown be juſt;
Doſt thou one parſon know, ſo void of grace
To pay his court to patrons out of place.
If ſtill you doubt (though ſcarce a doubt remains)
Search through my alter'd heart, and try my reins;
There, ſearching, find, nor deem me now in ſport,
A convert made by *Sandwich* to the court:
Let mad-men follow error to the end,
I, of miſtakes convinc'd, and proud to mend,
Strive to act better, being better taught,
Nor bluſh to own that change, which reaſon wrought.

After drawing ſuch character of the *Candidate* as no man can miſtake him, the poet proceeds

O gentle *Montague*, in bleſſed hour
Didſt thou ſtart up, and climb the ſtairs of pow'r;
England of all her fears at once was eas'd,
Nor, 'mongſt her many foes, was one diſpleas'd.
France heard the news, and told it couſin *Spain*;
Spain heard, and told it couſin *France* again;
The *Hollander* relinquiſh'd his deſign
Of adding ſpice to ſpice, and mine to mine,
Of Indian villanies he thought no more,
Content to rob us on our native ſhore;
Aw'd by thy fame, (which winds with open mouth,
Shall blow from eaſt to weſt, from north to ſouth)
The weſtern world ſhall yield us her increaſe,
And her wild ſons be ſoften'd into peace;
Rich eaſtern monarchs ſhall exhauſt their ſtores,
And pour unbounded wealth on Albion's ſhores.
Unbounded wealth, which from thoſe golden ſcenes,
And *all acquir'd by honourable means*,
Some *honourable chief* ſhall hither ſteer,
To pay our debts, and ſet the nation clear.
Nabobs themſelves, allur'd by thy renown,
Shall pay due homage to the Engliſh crown,
Shall freely as their king our king receive—
Provided *the Directors give them leave.*
Union at home ſhall mark each riſing year
Nor taxes be complain'd of, though ſevere,
Envy her own deſtroyer ſhall become,
And faction with her thouſand mouths be dumb,
With the meek man thy meekneſs ſhall prevail,
Nor with the ſpirited thy ſpirit fail,
Some to thy force of reaſon ſhall ſubmit,
And ſome be converts to thy princely wit,
Rev'rence for thee ſhall ſtill a nation's cries,
A grand concurrence crown a grand exciſe,
And unbelievers of the firſt degree
Who have no faith in GOD, have faith in thee.
When a ſtrange jumble, whimſical and vain,
Poſſeſs'd the region of each heated brain,
When ſome were fools to cenſure, ſome to praiſe,
And all were mad, but mad in different ways;
When Commonwealth's-men, ſtarting at the ſhade
Which in their own wild fancy had been made,
Of tyrants dream'd, who wore a thorny crown,
And with ſtate-bloodhounds hunted freedom down;
When others, ſtruck with fancies not leſs vain,
Saw mighty kings by their own ſubjects ſlain,
And, in each friend of liberty and law,
With horror big, a future *Cromwell* ſaw;
Thy manly zeal ſtepp'd forth, bade diſcord ceaſe,
And ſung each jarring atom into peace.
Liberty, chear'd by thy all-chearing eye,
Shall, waking from her trace, live and not die.
And, patroniz'd by thee, *prerogative*,
Shall, ſtriding forth at large, not die, but live,
Whilſt *privilege*, hung betwixt earth and ſky,
Shall not well know, whether to live, or die.
When on a rock which overhung the flood.
And ſeem'd to totter, *Commerce* ſhiv'ring ſtood;
When *Credit*, building on a ſandy ſhore,
Saw the ſea ſwell, and heard the tempeſt roar,
Heard death in ev'ry blaſt, and in each wave
Or ſaw, or fancied that ſhe ſaw her grave;

When

When *Property*, transferr'd from hand to hand,
Weak'ned by change, crawl'd ſickly thro' the land;
When mutual confidence was at an end,
And man no longer could on man depend;
Oppreſs'd with debts of more than common weight,
When all men fear'd a bankruptcy of ſtate;
When, certain death to honour, and to trade,
A ſponge was talked of as our only aid,
That to be ſav'd we muſt be more undone,
And pay off all our debts, by paying none;
Like England's better genius, born to bleſs,
And ſnatch his ſinking country from diſtreſs,
Did'ſt thou ſtep forth, and without ſail or oar,
Pilot the ſhatter'd veſſel ſafe to ſhore,
Nor ſhalt thou quit, till anchor'd firm, and faſt,
She rides ſecure, and mocks the threat'ning blaſt;

Towards the latter end of the poem (for it conſiſts of between 4 and 500 lines, which is more than Mr. Churchill uſually gives for half a crown) the poet touches upon divers perſons at Cambridge, but we do not chuſe to tranſcribe thoſe paſſages leſt it ſhould ſeem invidious.

ART. 2. *Mr. Hervey's meditations and contemplations, attempted in blank verſe, (after the manner of Dr. Young.) By T. Newcomb. Davis and Reymers.* 2 *vols.* 12*mo. Price* 6*s.*

The great merit of Mr. Hervey's meditations ſeems to have conſiſted in the ſtile being ſo near to poetry as to be almoſt poetry, only without the ſhackles. There ſeemed, then, very little reaſon to verſify that which ſeemed almoſt verſe already. However, as Mr. Newcombe has attempted it, we ſhall lay before our readers the firſt 32 lines of *The meditations among the tombs*, and leave them to judge of the merit of the attempt.

The ſun is ſunk, and o'er the ſilent world
Hath dim ey'd evening thrown her mantle grey;
Parent of muſings; ſhe with gloomy brow
Frowns on the trav'ller, and his way obſcures.
A rural village opening to my eye
Solicits me to ſtop. — An awful dome,
Magnificently high, arreſts my view,
Inciting me to gaze. — With pious dread
And rev'rence, I approach its ſacred ſhrines,
The doors unfolding wide like thoſe of heav'n,
To which they lead, a ready entrance yield;
The hallow'd ſtructure, lonely and retir'd,
Exalts the ſoul on contemplation's wings,
The breaſt inſpiring with a train of thoughts,
Mournfully pleaſing — ſerious and ſublime.
Solemn the pile, by age more ſolemn made,
And the ſad mould'ring relicks of the dead;
Rais'd by thoſe hands, which all-deſtroying time
Had whelm'd long ſince in duſt — Grim Death thy ſpoils!
Spacious the nave; and beautifully plain
The lofty roof; ſupported by a row
Of graceful pillars which the dome divide,
Simple, yet grand; the rays that faintly gleam'd
Thro' the dim windows ſeem'd to ſhed around
A darkneſs viſible, while ſilence ſlept
Soft on the boſom of the waveleſs air,
And crown'd with gloomy charms the ſolemn ſcene.
Religious dread now ſeiz'd upon my ſoul,
Thoughtful and penſive; each rude paſſion calm'd,
As now I reach the temple's inmoſt iſle,
Which diſſipates the gay ideas pour'd
From a vain world, remember'd now no more.

ART. 3. *The lives of all the earls and dukes of Devonſhire. By Mr. Grove of Richmond. Nourſe.* 8*vo. Price* 5*s.*

A ſad performance; patched up out of the different books of heraldry, chronicles, parliamentary hiſtories, &c. Mr. Grove knows ſo little of the noble family whom he pretends to write the hiſtory of, that even the groſſeſt errors and blunders of former writers he has not corrected, but taken the true and the falſe together, as they originally ſtood in the books which he has compiled from. The work is ſwelled out to a volume by a great number of uſeleſs and unneceſſary digreſſions; and what would have been really the moſt intereſting and entertaining part is omitted, viz. an account of the preſent duke, for the few pages which are taken up with his grace's name, are almoſt entirely filled with a character of the late king. This defect we apprehend muſt be attributed rather to the author's ignorance than his neglect; for we need ſcarcely make a doubt but he would have enriched his book in ſo material a point if he could. But we muſt obſerve, people ought not to ſet about writing of books, unleſs they are perfectly maſter of the ſubject on which they intend to treat.

ART. 4. *Wilkes and liberty: or the univerſal prayer. Williams.* 4*to. Price* 1*s.* 6*d.*

This poetical prayer conſiſts of ſome good and many bad lines; the following will ſerve for a ſpecimen, on which they will be pleaſed to form their own judgment.

The

The writer having addreſſed himſelf to the DEITY, proceeds with his application thus,

Oh be thou pleas'd to look with favour down
On George, the ornament of Britain's crown;
Oh teach the royal youth in time to know,
The blunt well-wiſher from the ſneering foe;
Urge him to read with care our annals o'er,
And learn what perfidies, what ſeas of g re,
What horrid times his predeceſſors knew,
When Scots were truſted, who were never true;
Cauſe him t'enquire at what their party aimes,—
Sick to our ſouls, diſguſted with the crimes,
That cloud the brows of their approbrious times,
Oh hear our pray'r thou great avenging GOD,
Whoſe boundleſs mercy yet reſtrains the rod,
From this ungrateful, this ungen'rous race,
Of impious men.

ART. 5. *A letter to the right hon. George Grenville, Eſq; Nicoll.* 8*vo.* *Price* 1*s.*

The drift of this pamphlet is to ſhew, that the right honourable gentleman, to whom it is addreſſed, is the moſt honeſt, the moſt able, and in a word, the beſt miniſter, with which this country was ever bleſſed; and, that Mr. Pitt is a fool, a tyrant, and a knave; that he is utterly unfit to have the conſtitution and intereſts of the kingdom in any wiſe truſted in his hands; and that the happineſs, liberty, and welfare of the kingdom, were never ſo thoroughly underſtood, and ſo ſteadily, and ſo ſucceſsfully purſued, as by the preſent miniſtry. Some abuſe is poured out upon the citizens of London, for oppoſing ſo *good* a miniſtry; and all thoſe who in different parts of the kingdom have in any meaſure imitated the metropolis, are called an ignorant rabble, and a tumultuous mob. As a ſpecimen of our author's panegyric, and devotion to the *prerogative*, we ſhall ſelect the following detached compliment (which is not ſo fulſome and aukward as many others) in page 37. "In you, Sir, we have a miniſter not obtruded upon his maſter, confeſſedly equal to the high poſt in which you are placed by his free choice; and while your country has a better chance of being ſerved by your abilities, that ſervice is not earned at the expence of a ſtrain upon regal authority, which wounds our conſtitution in a vital and eſſential part."

ART. 6. *The criſis. Being three ſtate poems on the following ſubjects: 1. the Northern dictator, a dialogue between a Highland peer and his vaſſals. 2. On the reduction of the Havannah and concluſion of the late peace. 3. Caledonia: a deſcription of that fertile and beautiful kingdom. Williams. Price* 1*s.* 8*vo.*

As a ſpecimen of the writer's genius and knowledge, we ſhall quote between thirty and forty of the firſt lines of his Northern dictator.

Near Hyde Park Corner ſoars a lofty pile,
The envy and the wonder of our iſle;
The royal dome which does in pride excell;
Where majeſty itſelf might chuſe to dwell.
In each rich pannel of each gorgeous room,
In paint, the northern thiſtle ſeems to bloom,
Whoſe ſtem, its pointed prickles proud to ſhew,
Threatens to cruſh each creeping ſhrub below.
Half India, each appartment ſeems to hold,
Settees, chairs, ſcreens—all rich with burniſh'd gold—
Here in black ſwarms his Northern tribes reſort
Where their mock-monarch holds his royal court;
In tatters ſome, and ſome in aukward ſtate
Preſs, puſh and ſhove, to enter firſt the gate;
And happy is the mortal who before
The reſt, can gain admittance to the door.
Their viſier's grandeur all ſubmiſſive own,
Who takes his chair — which ſome have call'd his throne,
And ſee the ſhew begins—(1ſt Scotchman) my merit ſmall,
But as your bounty, Sir, is ſhower'd on all,
Something for my paſt ſervice I may claim;
Noble my birth and Stuart is my name.
Well pleas'd and proud your orders to fulfill,
I battled ſtrongly for *your* cyder bill.

The ſcene which theſe and the ſucceeding lines give a deſcription, may, perhaps, to ſome of our readers be not unentertaining. The verſification is in general tolerable, and in ſome places very good: but where the author ſeems to hint at facts he deviates greatly from truth: for inſtance, in the verſes above quoted he places the houſe of the *Northern* noble lord *near Hyde Park Corner*, whereas, his preſent houſe and that which is building, are both far diſtant, and if it was not for the other parts of the poem, nobody would apprehend the firſt ten lines were meant as a deſcription of his lordſhip's houſe. The laſt line (above quoted) is equally falſe, "*your* cyder bill." It is, or ought to be known, that the chief and real author of the exciſe on cyder, was the

the right honourable gentleman who ſucceeded to his lordſhip's late high employment. It is therefore a degree of juſtice to his lordſhip's character, which we will be bold to do however unpopular he may be, to detect, this falſity, which has been ſo univerſally ſpread. The praiſe, or the odium of that meaſure, wholy belongs to another.

ART. 7. *Elegies. By Robert Scott. Burnet, 4to. Price 1s.*

Theſe elegies are eight in number, viz. To Venus. On ſeeing two larks that were ſhot. To Narciſſa. On the death of general Wolfe. To Delia. On Weſtminſter-abbey. To melancholy. And, In the manner of Tibullus. Mr. Scott's merit, as a poet, our readers will judge of upon our laying before them the four firſt ſtanzas of his firſt elegy.

Gay Venus, gentle queen of ſoft deſire,
Oft have I bended at thy ſacred ſhrine;
Oft did my earneſt vows of thee require,
('Twas all I wiſh'd) to call my Delia mine.

But now the dear deluſion charms no more;
I know thee deaf to my neglected pray'r:
Now ev'ry joy, and ev'ry hope, is o'er,
And all behind is ſorrow and deſpair.

Why ſhould I longer ſeek, with uſeleſs care,
The fragrant myrtle, and ſweet bluſhing roſe?
And why the garland for thy ſhrine prepare,
Regardleſs as thou art of all my woes?

Why ſhould I worſhip her who ſcorns my woes?
And love the maid that does my love diſdain?
The giver of each tender pleaſure thou,
Yet all thou giv'ſt to me is grief and pain.

In this languid ſtrain he goes on throughout all his elegies.

ART. 8. *Ethic epiſtles, upon the plan of revealed religion. Cooke. 4to. Price 1s.*

A very poor performance. Of the merit of the verſification our readers may judge from the following lines in page 8.

But what can pow'r omnipotent withſtand?
Or what is nature but god's great command?
"Let there be light," thro' tracts of boundleſs ſpace,
Kindled at once, the univerſal blaze.
Suns glow'd o'er ſuns, and loſt in diſtant air,
Twinkled in conſtellations, each a ſtar.

We will only add, the whole ſeems to be a confuſed heap of jargon.

ART. 9. *The budget. Inſcribed to the man who thinks himſelf miniſter. Almon. 4to. Price 1s.*

As this Pamphlet makes a prodigious noiſe in town, having gone through ſeveral editions, and is univerſally ſuppoſed to be the production of ſome of the leaders of the minority, we ſhall, for the benefit of our country readers, ſelect the writer's concluding remark, (which being a detached paſſage, may be done with propriety) for their amuſement, as they will doubtleſs be pleaſed with ſeeing a part of what has been deemed ſo much worthy of notice in town.

But ſtill our fate would not relent; leſt public credit ſhould once more hold up its head, theſe m———s have held the ſame deadly hand over their country. They will do nothing themſelves, they will not ſtir a finger to relieve us, they will ſtay till they have ſeized every beneficial patent and reverſion, and we may be ſure that they will not alarm the country by any tax, however neceſſary it may be, or however eaſily it might have been carried by other miniſters, whoſe credit ſtands high in their country. If they can riot in the public ſpoils for a few hours, they regard not the conſequences, either of public bankruptcy from their neglect of the revenue in the proper ſeaſon, or the diſcontents which they have beſpoke againſt the next adminiſtration, who muſt either patiently ſubmit to the bankruptcy of their country, or lay freſh taxes in cold blood. In ſhort, this m———act upon the principle of a ſet of ſh——s, who have laid a bett that their country will expire of the wounds ſhe has received in the late war, and therefore will not allow it the fair play to ſend for a ſurgeon.

Have not the miniſtry boaſted that they would raiſe the ſtocks by diſappointing the ſchemes of thoſe who expected to bring their money to a good market, and to profit by the public diſtreſs; yet the ſtocks have not riſen ſince the miniſter has declared his intentions againſt borrowing: for who can avoid ſeeing that the evil is only put off till to-morrow. As long as there is ſo large a quantity of debt unprovided for, and which the miniſter declares he will not provide for, public credit will languiſh, while neither the vaunting of miniſters nor their threats will afford any ſupport. Has not the miniſter told the proprietors of navy-bills, that their not ſubſcribing to the 4 *per cent.* annuities was faction? Has not the ſharp vengeance of parliament been held out againſt them as *delinquents?* Have they not been threatened to be paſſed over in the courſe of payment, contrary to the expreſs terms of their contract? Have we not heard this

this propoſition enforced upon a diſtinction between the faith of parliament, and the honour of parliament? Does not this diſtinction afford an encouraging proſpect to public credit? I hope the faith of parliament and the honour of parliament will be for ever one; although we have experience that the faith of parliament and the honour of miniſters are to each other as light and darkneſs. What meeting was that which was called of the pretended proprietors of navy-bills in January laſt? How many of them ſigned a petition to the treaſury, relating to unſubſcribed navy bills, who were not actually in poſſeſſion of any at that time? What is the great cauſe of reſentment and threats for the non-ſubſcribers of navy-bills made out before December, 1762? Plainly this, that the contractors, who ſince that time, have taken their navy-bills of the *preſent* adminiſtration, might be brought forward in the courſe of payment as a reward for all their obedience; while thoſe who had made contracts with the former adminiſtration were to feel the hand of tyranny and oppreſſion. Yet, was not every one at liberty to chuſe whether he would ſubſcribe? or if theſe proprietors of navy-bills are to be compelled to ſubſcribe whether they will or no, why is not this principle extended to all the proprietors of the funds? Let the miniſter publiſh his edict, that, if they will not be contented to give up half their principal, they ſhall never be paid at all, either principal or intereſt. In God's name, if public faith is to be violated, let it not be done for a trifle: be bold; ſpunge out half the debt, and annex the intereſt to the ſinking fund.

Our miniſters boaſt that they have raiſed the ſupplies this year without any additional tax. Now, other people ſee all this in a very different light; for the miniſtry have only poſtponed the neceſſary proviſions, they have left near ten millions of outſtanding debt, which, till it is funded, will infallibly depreſs all the other ſtocks; we ſee that it does ſo, as they are at this moment 15 *per cent.* below par, and this I call a tax upon all ſtock-holders. Aſk the monied intereſt, whether the preſent miniſtry has laid any tax? and they will tell you, that their property is worſe by 20,000,000*l.* than it would be if miniſters would do their duty; and if this is not a tax, let the miniſter give his definition of taxing.

Then go to the landed intereſt, and enquire what merit the miniſtry are to claim with them. Their merit is this: that they will not exert themſelves to provide for the neceſſities of the ſtate by a plan of diſtributing the burthen, and therefore have thrown the whole upon the ſhoulders of the landed man; rather than ſtir themſelves to effectuate any plan, by which the landed gentlemen might have to pay no more than their reſpective proportions, according to their way of living, they have transferred the whole upon the land, which from henceforward can have no chance of paying leſs than four ſhillings in the pound. That the landed men may ſee how decided and hopeleſs their fate is, I ſhall ſtate the current expence, and the annual proviſion that there is to ſupport it.

The avowed peace eſtabliſhment amounts to		3,500,000
The ways and means are,		
By land at 4s. and malt, which will yield nett about	2,450,000	
By the ſinking fund, which, till ſome farther proviſion be made for the outſtanding debt, will yield no more than about	1,270,000	
Total annual proviſion for the current expence, during the time of peace, including the land tax at 4s.		3,720,000

The ſurplus being about 220,000*l.* is to anſwer all contingent expences; ſuch as an occaſional ſubſidy, a fleet of obſervation, and a variety of incidental matters, which in the moſt peaceable times muſt occur: in the next place, it is to be applied to the payment of near ten millions of outſtanding debt, which indeed half a century of undiſturbed peace may poſſibly accompliſh; and, at the end of this period, the land-tax may ſtand ſome chance of being reduced a few pence below four ſhillings in the pound. If the landed gentlemen are well pleaſed to take the whole burthen upon their own eſtates, (being a mortgage of a million *per annum*) inſtead of paying their ſhare of any tax according to their domeſtic conſumption, I hope they have at length met with a miniſter to their perfect content.

ART. 10. *An alarm to the ſtockholders. Neceſſary to be peruſed by thoſe who have any property in the bank, or any of the public funds.* *Cooke.* 8*vo.* *Price* 6*d.*

Contains ſome ſevere animadverſions on the bank; the directors of which the writer charges with gaining immenſe ſums from the public by ſeveral ways, which he in

ſome meaſure explains, and for which we muſt beg leave to refer thoſe concerned to the pamphlet itſelf. Towards the concluſion the writer propoſes a ſcheme for

FOREIGN BOOKS, and LITERATURE.

Tabulæ Temporum Futorumque Orbis Terræ, ab Orbe condito uſque ad Chriſtum natum ab. A. M. I. 4000. *quas, Præſide* Joanne Michaele Lorenzio, *ad D.* xxiv. Sept. A. R. S. 1761. *Solemni Eruditorum examini ſubjicit Auctor* Joh. Michael Lobſtein, *Argentinenſis*, Argentorati 4°.

The author of this Theſis propoſes a thorough examination of Chronology in general. For the ſacred Chronology he adopts the Hebrew Text, which, as he aſſerts, has ſuffered no alteration; which cannot be ſaid either of the Samaritan or the Septuagint: of which he cites ſome examples in his notes. For the Grecian Hiſtory he follows the Arundelian Marbles; for Aſia *Ptolemy*'s Canon; the *Faſti Capitolani* for the Roman Hiſtory, and *Varro* for the Beginning of that Hiſtory. Beſides theſe he has conſulted *Diodorus Siculus*, *Joſephus*, *Polybius*, *Dionyſius Halicarnaſienſis*, *Titus Livius*, *Dion Caſſius*, *Euſebius*, *Syncellus*, and the *Faſti Conſulares* publiſhed by Cardinal *Noris*.

After having exhibited the Authorities on which he has eſtabliſhed his Chronological Syſtem, he undertakes to prove that 4000 years had elapſed from the beginning of the World to the Birth of *Jeſus Chriſt*: He gives Tables of the Generations of the Patriarchs, and endeavours to demonſtrate that *Tharah* begat *Abraham*, not at 70 years old, but at 150. As to the times of the Judges, which might ſuffer ſome difficulty by placing them ſucceſſively, he obſerves that theſe Judges did not govern ſucceſſively the twelve tribes; but that there were ſometimes two, and even three, which reigned over them at the ſame time. From the Judges he paſſes on to the Times of the Kings; and gives a ſuccinct account of the Duration of their Reigns.

Being come down to the Time of *Jeſus Chriſt*, in a ſecond article he attempts to prove, that the Duration of the Times given by *Moſes*, agrees with the Hiſtory of other nations, to wit, that *Cecrops* founded the kingdom of Athens *Anno Mundi* 2421; that the *Olympiads* began *Ann.* 3226; that *Rome* was built *Ann.* 3198; and that the Years of *Nabonaſer* concur with *Ann.* 3255.

On the Canon of the Kings of *Aſſyria* he makes many obſervations which we cannot here recite. He in like manner makes the like Scrutiny into the foundation of Rome, the *Olympiads*, the Reign of Cecrops, and finiſhes his work by Parallel Tables to the holy Scriptures, of *Egypt*, *Aſſyria*, *Greece*, and *Rome*. Upon the whole, this little performance is repleat with inquiries which manifeſt the Author's great Erudition, and his thorough acquaintance with the ancient Writers.

another bank, which (in his own words) "he is authoriſed to ſay, is intended to be called The Royal Bank of Great-Britain."

A Prize propoſed by the ELECTORAL PALATINE ACADEMY.

THE *Elector Palatine*, long famous for the love he bears to Literature, and for his ſingular protection to the profeſſors thereof, has lately given another illuſtrious proof of it, by inſtituting, the 20th of laſt *October*, an Academy at *Manheim*; ſeveral Journals and periodical Pieces have indeed ſpoken of this new eſtabliſhment, though they have given a very imperfect idea of it. We therefore preſume that we ſhall render a very agreeable piece of ſervice to the Republic of Letters, by communicating the intelligence we have received on this head, as likewiſe of the firſt Prize which this new Society has propoſed for this preſent Year.

The Object of the Academy is *Civil and Natural Hiſtory in general*, with every thing that has relation thereto; the Number of the Academicians is limited to 15, of which there are a Preſident, a Perpetual Secretary, a Treaſurer, and an Under-ſecretary. By the Statutes of the Academy, the *Latin* Language has the preference of all others, without, however, excluding them. *Princeps Latina, Germanica et Gallica ſubſidiariæ ſunto.* The Prize to be diſtributed annually is a gold Medal of fifty Ducats. The deſire of examining into the Hiſtory and Natural Productions of the *Palatinate* ſeems to have determined the Elector to this Eſtabliſhment.

The Academy of Sciences and Belles-Lettres erected at *Manheim*, propoſes the following queſtion for the Year 1764.

What was the Origin of the *Comes Palatinus* under the *Roman* Emperors, and what was his office and condition under the *Merovingian* and *Carlian* Kings until the diviſion of the *French* monarchy into Eaſt and Weſt? And at what time were the Domains of the Crown affixed to that Dignity.

The Diſſertations relative to this Queſtion may be in *Latin*, *French*, or *German*: And they are to be addreſſed to M. *Lamey*, Perpetual Secretary of the Academy, and Librarian to his Serene Electoral Highneſs, before the firſt of next July. The Authors are to ſeal up their names in a ſeparate Billet, as is the Cuſtom of other Academies.

A

A CHRONOLOGICAL MEMOIR of OCCURRENCES.

For MAY, 1764.

FOREIGN AFFAIRS.

DENMARK.

ON the 30th paſt a man died, in the iſland of Tunen belonging to the king of Denmark, at the extraordinary age of 141 years, wanting three days: he was born in the year 1623.

Letters from Copenhagen of the 11th inſtant import, that a terrible fire happened the 1ſt inſtant at Frederickſhall (a fortreſs remarkable for the death of king Charles the XII. of Sweden, who was killed there at the ſiege in the year 1718) which burnt ſo very furious, that the whole town was reduced to aſhes, except the magazines.

RUSSIA. According to the laſt letters from Peterſburgh, the courts of Ruſſia and Denmark are on the point of renewing the treaties of friendſhip and alliance ſubſiſting between them.

POLAND. *Warſaw, April* 11. Count Poniatowſky received laſt night by the hands of the Pruſſian miniſter, the order of the black eagle, which the king has been pleaſed to honour him with. *Lond. Gaz.*

The march of a detachment of Ruſſian troops to Zakrokzym, in the neighbourhood of Warſaw, and the entry of ſeveral ſquadrons into the republic, have made ſo much impreſſion, that the prince primate found himſelf obliged to demand an explanation of the motives of the court of Peterſburgh in this ſtep. To this the Ruſſian miniſters gave anſwer the next day, "That her imperial majeſty was far from troubling the repoſe of the republic: that the dietines ſhould have no cauſe to fear any violence: that all the places where they were to be held had been evacuated: that the return of the troops in a greater number was to execute that by force which could not be obtained by a plurality of free voices: that this meaſure had no other object than the maintenance of the public tranquility: that it was only intended to extinguiſh the ſparks before the nation was all in a flame: that the troops paid ready money, and that they ſhould not become burthenſome to any of the ſubjects."

GERMANY. They write from Sluchteren in Germany, of the 2d inſtant, that a water-ſpout or cloud happened to break near that place, by which ſix of the adjacent villages were quite ruined.

They write from Hamburgh, that an epidemical diſtemper has prevailed for ſome weeks amongſt the oxen, ſheep, hogs, and horſes, in the neighbourhood of Nordhauſen in Holſtein.

The magiſtrates of Francfort on the Mayne, at the requeſt of the king of Pruſſia, have permitted the inhabitants profeſſing the reformed religion to build a church near the ramparts of that city.

Vienna, April 25. On Monday laſt the emperor, and the king of the Romans, returned hither in perfect health. The ſame evening there was a drawing-room in Grand Gala, where their majeſties received the compliments and congratulation of the ambaſſadors and the foreign miniſters, as well as of all the nobility here. The next day the whole royal family went in ſtate to hear Te Deum ſung in the cathedral of St. Stephen; after which they dined in public, and in the evening went to the court theatre, which was finely illuminated (as were the three triumphal arches erected on this occaſion) to ſee a repreſentation of a muſical entertainment, compoſed in honour of the king of the Romans; and this evening there is to be a repreſentation of a French play, which will conclude the rejoicings. *Lond. Gaz.*

Berlin, May 5. On the 2d inſt. in the evening, his Pruſſian majeſty came to Charlottenbourg, where he remained two days, in order to review the regiments quartered in this town; and returned to Potzdam on Friday night. Achmet Effendi, the Turkiſh internonce, ſet out from hence on the 2d inſtant. He was eſcorted by a ſquadron of huſſars to Frankfort upon the Oder, which will be relieved by another at Glogaw and Breſlaw, and ſo on to the frontier of Poland. *Lond. Gaz.*

Letters from Vienna ſay, that the preſents made at Francfort, on account of the coronation of the king of the Romans, amounted to two millions.

Letters from Pruſſia adviſe, that a faſt-day was appointed to be kept at Dantzick, on account of the calamity of war with which the kingdom of Poland is threatened.

Above a thouſand Roman coins and medals, all well preſerved, were found the beginning of this month by ſome peaſants as they were digging in the neighbourhood of Xanten, near Weſel, in Germany.

FRANCE. *Verſailles, May* 5. The dauphineſs was brought-to-bed of a princeſs the 3d inſt. about three in the morning. The ſame day the whole royal family, and ſeveral of the nobility, were preſent at the king's chapel immediately after maſs, to

aſſiſt the chriſtening of the new-born princeſs, who was baptized by the names of Elizabeth-Philipa-Maria-Helena.

Letters from France give an account of a quarrel at Montauban, between the king's advocate, and a Life-guard-man, relative to the affair of the duke de St. James, at Toulouſe, whoſe conduct the ſoldier vindicated: in which the advocate was run thro' the body.

Paris, May 11. The Court of England having conſented to communicate to our's the different records and inſtruments concerning the rights, domains, and poſſeſſions of the crown, which are in the archives of the exchequer, the king has nominated M. de Brequigny, of the royal academy of belles-lettres, to go to take copies of them, and he is accordingly ſet out for that purpoſe. *Bruſſ. Gaz.*

The write from Paris of the 15th inſtant, that the duke d'Olonne was ordered by the marſhal of France to be ſent to the caſtle of Saumur; the reaſon for which ſtep was not publickly known.

SPAIN. *Cadiz, April* 17. We have had a mortality amongſt the poultry, and eſpecially the hens, which has daily carried off a conſiderable number. This mortality is ſuppoſed to be occaſioned by the bad quality of the corn with which the animals were fed. Some time ago there was a like malady amongſt the dogs, but that did not make any great progreſs.

PORTUGAL. They write from Liſbon, that the French miniſter at that court had claimed, in his maſter's name, all the French merchants and traders who at the beginning of the late war had been obliged to be naturalized there.

ITALY. On Thurſday the 12th ult. ſix cardinals by advice of the ſacred college, and with the conſent of the pope, went to the caſtle of St. Ange, where the treaſure of pope Sextus V. is depoſited, and took out 300,000 crowns in old ſpecie, which were carried to the mint to be recoined, in order to purchaſe grain for ſupplying the ſtates of his holineſs, which are in great want. It has always been a law with the ſacred college not to touch this treaſure but at the laſt extremity.

They write from Rome of the 14th ult. that the abbot Fioni was ſent to the caſtle of St. Angelo, for communicating to the French miniſter the contents of a private brevet, by which the late jeſuits of France are to obſerve the rules and regulations of that order in a lay habit.

Florence, April 17. On Wedneſday evening marſhal Botta, accompanied by the other members of the regency, came to wiſh his royal highneſs the duke of York a good journey. The duke, attended by Sir Horace Mann, ſet out next morning for Sienna, where he arrived early in the evening, and was received with the ſame military honours as at Leghorn: The nobility of both ſexes came out of the town in their coaches to meet him: and as ſoon as he arrived at the inn where he lodged, (part of which, by marſhal Botta's order, was furniſhed from the emperor's wardrobe there) the governor, and the general who commands there, at the head of his officers, came to pay their reſpects to his royal highneſs, and attended him to ſee the principal curioſities of the place; after which he paſſed the evening at a lady's houſe, who, by an order from marſhal Botta, had prepared a ball and a ſupper for him. The next morning his royal highneſs ſet out for Rome, and was ſaluted by the cannon as the day before. *Lond. Gaz.*

Florence, May 1. Letters from Rome of the 28th paſt bring advice, that his royal highneſs was entertained on the 24th by cardinal Alexander Albani, at his houſe out of the Salara gate; the next day at the houſe Corſini; and on Thurſday the 26th, there was a public horſe-race of Barbs; and in the evening the pope ordered all the prints of Rome, curiouſly bound, and two fine pictures, to be carried and preſented to his royal highneſs. The duke ſeemed well ſatisfied with the attention ſhewn by all orders of the court and city, to render his ſtay there agreeable. *Lond. Gaz.*

Florence, May 5. The duke of York left this place this morning at four o'clock, with an intention to reach Bologna this evening. His royal highneſs has expreſſed the greateſt ſatisfaction at the attentions that have been ſhewn to him both by this government and at Rome. The duke propoſed to ſtay two days at Bologna, and then go to Parma and Reggio, where both the duke of Parma and the duke of Modena have made diſpoſitions to receive him. *Lond Gaz.*

Naples, May 1. The many ſupplies of corn lately arrived at this port, have greatly leſſened the diſtreſſes this city laboured under from the want of bread; and, in all probability, we ſhall very ſoon be entirely free of our fears on that account, as there are freſh ſupplies coming in daily from all parts. *Lond. Gaz.*

Florence, May 12. The rejoicings here for the election and coronation of the king of the Romans are to begin to-morrow being the empreſs's birth-day: they are to laſt for three days.

The ſcarcity of corn at Rome is greatly diminiſhed by the conſiderable ſupplies that have

have been received from abroad at Civita Vecchia, and Ancona. *Lond. Gaz.*

Turin, May 18. The iſland of Sardinia being now in want of corn, this court has ordered a conſiderable quantity to be immediately ſent into that part of his Sardinian majeſty's dominions, through the Genoeſe ſtates; and they have alſo granted the republic leave to extract from Piedmont 5000 bags of corn for their own uſe. *Lond. Gaz.*

SWITZERLAND, *May* 4. There is a talk of great troubles being ariſen at Lucerne; and alſo of much confuſion at Schweidtz and Underwalden. It's added, that there came yeſterday in the evening an expreſs to Berne, to demand ſuccours; and that, at the departure of the courier from the laſt mentioned city, 10,000 men were going to be put in motion. *Leyden. Gaz.*

TURKEY. There are ſome letters from Conſtantinople, which ſeem to menace Ruſſia with a declaration of war on the part of the Grand Signior.

EAST INDIES.

THE laſt Dutch Eaſt India ſhips, which arrived in Holland from Batavia, brought from letters Caſſambazar, which give an account, that in March 1763, a moſt violent fire happened at Moxudabath, which had reduced that place to aſhes. And that on the 2d of April following, there was ſuch a vehement earthquake at Deher or Decca, that it cauſed the water in the river Ganges, to riſe twenty feet above its common courſe, and agitated it in the ſame way as it is at new and full moon: upwards of 500 veſſels with proviſions, and a great number of people's lives were loſt; but the moſt ſhocking and diſmal account was at Lockepoor, about two days journey from Decca, where a circuit of land near 15 Engliſh miles in circumference was ſwallowed up, and all the people and cattle on it were drowned.

A M E R I C A.

Philadelphia, March 29.

DUring the ſitting of the aſſembly, the following among other laws were paſſed, viz.

An act for the payment of 10,947l. ſterling, in certain proportions, to ſeveral colonies in America.

An act for preventing tumults and riotous aſſemblies, and for the more ſpeedy and effectual puniſhment of the rioters.

Philadelphia, April 5. The diſtreſſes of the back inhabitants are greater than can well be conceived. Two hundred miles of an extended frontier are ſo expoſed to the incurſions of Indians, that no man can go to ſleep within 10 or 15 miles of the borders, without being in danger of having his houſe burnt, and himſelf and family ſcalped, or led into captivity, before the next morning. On the 20th of laſt month five perſons were made priſoners. Seven houſes were burnt down on the 21ſt, and a great number of horſes, cows, ſheep, and hogs, were killed.

I R E L A N D.

THE citizens of Corke have placed a fine white marble ſtatue of Mr. Pitt, as big as life, in a niche on their exchange, with the following inſcriptions: "In honour of Mr. PITT, late ſecretary and miniſter of ſtate to their majeſties king GEORGE II. and III. of Great Britain, who, in a few years of his able and upright adminiſtration, reſtored the honour of the Britiſh arms, together with the ſafety, influence, and glory of his king and country, this ſtatue is erected by the citizens of Corke, Anno 1764." This is on one plate. On another is the following: "Siſte Viator ubicunque Terrarum oriundus. Vera Icon GULIELMI PITT cujus ſi Nomen audies, nihil hic de Fama deſideres.

C O U N T R Y.

Cambridge, April 29.

THE prince of Mecklenbourg-Strelitz, attended by the duke of Ancaſter, and the two barons de Witz, arrived here at 12 o'clock to-day; an extraordinary congregation of the ſenate was aſſembled in readineſs to receive him, in which the doctors, &c. appeared in their proper habits, as on high feſtivals. His highneſs was complimented in a ſhort ſpeech from the vice-chancellor, and accepted the honorary degree of doctor of laws.

Oxford, May 4. On Tueſday laſt her majeſty's youngeſt brother viſited this univerſity, through which he was conducted by the dean of Chriſt church; and having ſeen the

the colleges, publick buildings, &c. left this place the day following, after expreſſing the higheſt ſatisfaction.

At a general meeting of the ſheriff, gentlemen, clergy, and freeholders of the county of Devon, held at the caſtle of Exeter, the 3d of May, 1764, it was reſolved, that a piece of plate be preſented to Benjamin Heath, Eſq; with the following inſcription:

The GIFT
Of the gentlemen
Of the county of Devon,
To BENJAMIN HEATH, Eſq;
In grateful acknowledgement
Of his ſtrenuous endeavours
To reſcue them from
The oppreſſion
Of the cyder act;
Endeavours exerted
With the utmoſt honour to himſelf,
But unhappily (thro' the Magic
Of ſuperior Influence,
Proof, even againſt declared conviction,
And thro' the infidelity
Of pretended patriots, and falſe friends)
As yet without that ſucceſs
Which was due to the force
Of his unanſwerable arguments,
And the juſtice of the cauſe.

Sat patriæ priamque datum——Si pergama dextrâ defendi poſſent, certé hac defenſa fuiſſent.

The corporation of Thetford, have ſent their thanks to lieutenant general Conway, for his ſpirited, conſcientious, and unbiaſſed conduct in parliament; particularly on that moſt important queſtion, the ſeizure of private papers by the warrant of a ſecretary of ſtate; to which the general has returned a very polite anſwer, aſſuring them, that as it was real ambition to deſerve the favour of his conſtituents, ſo it ſhould be his conſtant object to maintain it, by a ſtrict adherence to that conduct and thoſe principles which they recommend.

Folkſtone, May 12. The vigilance of his majeſty's armed cutters, ſtationed from the North-Foreland to Beachy-head, is ſuch, that ſcarce a ſmuggling boat from France or Holland has eſcaped them for ſome time paſt. Perſons of property not long ago in that branch, by repeated loſſes, are now reduced to the loweſt ebb.

L O N D O N.

May 1. YEſterday lord Clive was ſworn before the court of directors of the honourable Eaſt India company, commander in chief of the company's forces in India.

2. The ſeſſions began at the Old Bailey, when three priſoners were capitally convicted, viz. Michael Sampſon for forgery; William Turner and Joſeph Redman, for robbing on the Highway. Sixteen were caſt for tranſportation and ſix acquitted.

A general court of the Eaſt-India company was held at Merchant Taylors Hall, in Threadneedle-ſtreet; when it was reſolved that the following queſtion ſhould be determined by Ballot at a general court to be held to-morrow morning; namely, "that it be recommended to, and that the court of directors be empowered to agree with lord Clive for the payment of his jaghire for the ſpace of ten years, provided his lordſhip ſhall ſo long live, and the company ſhall be in actual poſſeſſion of the lands out of which it iſſues, and the revenues thereof, during that period of time."

3. Eight priſoners were capitally convicted at the Old Baily, viz. William Smith and John Fairbrother, for ſtealing; John Ives, Richard Gray, and David Overton, alias William Smith, for burglary and ſtealing; John Learing, George Knight and James Boylan, alias Baylan, for robbing on the highway. Twelve were caſt for tranſportation, two whipped and diſcharged, and three acquitted.

4. Twenty two priſoners were tried at the Old Bailey; 14 of whom were caſt for tranſportion, and eight acquitted.

A cauſe came on to be tried before lord chief juſtice Pratt, at Guildhall, on an action brought by Mr. Beardmore, againſt four of his majeſty's meſſengers, for falſe impriſonment and unlawfully ſeizing his papers, &c. which laſted till four o'clock; when the jury withdrew for about three quarters of an hour, and brought in a verdict for Mr. Beardmore of 1000l. damages.

Laſt night at the cloſe of the ballot at merchant taylors hall, the numbers were:

For allowing lord Clive his jaghire	514
Againſt it	453

The court broke up at ſix o'clock in great confuſion

5. Twenty four priſoners, were tried at the Old Bailey, one of whom was capitally convicted, viz. John Dixon, for returning from tranſportation before the expiration of his time. Seventeen were caſt for tranſportation; two of whom were, Elizabeth Fowler, and the noted Richard Swift, for receiving goods knowing them to have been ſtolen. And ſix acquitted. After which, 12 received ſentence of death, (Turner, who was capitally convicted on Wedneſday, died on Friday night). Three received ſentence to

to be tranſported for 14 years, 33 for 7 years, one branded, and 8 to be whipped.

7. At the ſeſſion of goal delivery for the city of London, which ended this day, 7 priſoners were tried, 3 of whom were caſt for tranſportation, and 2 acquitted. John Pike, for ſtealing three quartern loaves, value 10d. was whipt and diſcharged. Eliz. Dunn, alias Beck, for tendering in payment a counterfeit piece of money, reſembling a ſixpence, knowing the ſame to be counterfeit, having another in her cuſtody, with intent to defraud, is to be impriſoned ſix months, and find ſecurity for ſix months (it being the firſt offence); the third offence is death. Sentence of tranſportation was paſſed upon 17. Two were ordered to be privately whipt and diſcharged, and 5 were diſcharged by proclamation.

This evening the eldeſt daughter of capt. Frumpton, commander of the Seahorſe, outward bound, went on board the ſhip, lying off Blackwall, to take leave of her father, and coming down the ſhip ſide, miſſing her hold, ſhe unhappilly fell into the river, and was drowned.

10. The ſtewards for the feaſt of the ſons of the clergy collected at St. Paul's church 136l. 5s. 3d. and at the dinner at Merchant Taylors Hall 551l. 19s. 3d. Theſe ſums, with 244l. 2s. 9d. collected at the rehearſal of the muſick, make 932l. 7s. 3d. All which is expended by the ſtewards, in apprenticing ſons and daughters of poor clergymen. Beſides this, there is a legacy of 50l. left by a lady, which is not yet received.

11. The right hon. the earl of Pembroke kiſſed his majeſty's hand, on being appointed to the command of the regiment late general Conway's.

16. The right hon. the lord high chancellor kiſſed his majeſty's hand on being created an earl, by the title of earl of Northington, viſcount Henley, and baron of Grange in Hampſhire.

17. Yeſterday being the anniverſary of her majeſty's birth day, who entered into the 21ſt year of her age, their majeſties received the compliments of the nobility, foreign miniſters, and gentry, on the occaſion.

This day a general court of proprietors of Eaſt India ſtock was held at Merchant Taylors Hall, in conſequence of the demand of nine proprietors, agreeable to charter, when a queſtion was put and carried, to the following purport: "That, the company's affairs in Bengal requiring immediate attention, and the ſeaſon being far advanced, lord Clive be deſired to embark forthwith for that government; and that all the officers now appointed be ordered to proceed thither without delay." The thanks of the court were afterwards moved and carried to be given to the chairman, and to the directors. And the court broke up, upon an adjournment *ſine die*.

Yeſterday his excellency the earl of Northumberland and his counteſs arrived in good health at his houſe at Charing-croſs from Ireland.

18. Laſt night, about 12 o'clock, a melancholy accident happened at Mr. Pennington's, a haberdaſher on Ludgate-hill: a ſervant maid fell aſleep on the bed-ſide, having inadvertently left her candle burning ſo near her, that her cloaths took fire; the family were ſoon alarmed by her cries, and the flames ſpread over her ſo quick, that as ſoon as Mr. Pennington entered the room, he found her in an entire blaze, on which he tore off as much as he could of the burning cloaths, and extinguiſhed the reſt by preſſing upon her one of her gowns. The ſervant was ſent to an hoſpital, but with little hopes of recovery.

23. Yeſterday came on before lord Mansfield, and the other judges of the court of King's Bench, at Weſtminſter-hall, the trial of Philip Carteret Webb, Eſq; member of parliament for Haſlemere in Surry, ſolicitor to the treaſury, and F. R. S. for Perjury, when the jury, which was a ſpecial one, after an abſence of an hour, brought in their verdict, not guilty.

The lords of the admiralty are making the tour of all the yards belonging to his majeſty to inſpect the ſhipping, ſtores, &c.

25. On Wedneſday and yeſterday the Morocco ambaſſador had his audience of leave of their majeſties; he being ſoon to return home. He came to court each day in his majeſty's coaches, attended by his majeſty's domeſticks.

26. Yeſterday by adjournment, came on before lord chief juſtice Pratt, and the reſt of the judges of the Court of Common-Pleas at Weſtminſter-hall, a hearing, wherein the council for Mr. Beardmore were to ſhew cauſe why a new trial ſhould not be granted, in order to ſet aſide the verdict given in a trial at Guildhall againſt four of his majeſty's meſſengers, on account of exceſſive damages; when the motion was over-ruled, and the former verdict confirmed.

28. Friday at a Court of Directors of the Eaſt India Company, after ſeveral debates concerning the company's affairs at Bengal, &c. every thing was amicably adjuſted.

The ſtatue of his preſent majeſty erected at the Royal Exchange, of which we gave a print in our laſt magazine, is executed by Wilton in marble, and has no gaudy embelliſhments of gilding, which renders its appearance very different from the reſt of the ſtatues in the ſame area, which are in free ſtone, and decorated in that manner.

His majeſty is repreſented in the Roman military dreſs, which on the whole, does honour

honour to the ſculptor, tho' he has not eſcaped defects; in his left-hand he holds a truncheon, his right is extended in an attitude of pleaſing affability towards his people.

BIRTHS. The Lady of Sir John Gibbons, bart. of a ſon.—The Lady of Sir Digby Legard, bart. of a ſon —The Lady of Chriſtopher Whitchcote, Eſq; of a daughter.—The Lady of the right hon. the Earl of Sutherland, of a daughter.

MARRIAGES. Dr. Wicks, lecturer of St. Alban's Woodſtreet, to Miſs Floyer, niece of Mr. Floyer, refiner, in Love-lane.—Lucy Knightly, of Fawſley, Eſq; member of parliament for Northampton, to Miſs Daſhwood, econd daughter of Sir James Daſhwood, bart. ——The Rev. Dr. Nichols, preacher to the Charter-houſe, to Miſs Hyde, daughter of John Hyde, Eſq; governor of the London aſſurance company.——The right hon. the Earl of Pomfret, to Miſs Draycott, of Saville-Row. —The Rev. Mr. Richard Dodd, to Miſs Wynantz, of Camberwell.——Charles Milborne, Eſq; to the hon. Lady Harley, only ſiſter to the right hon. the Earl of Oxford.—The right hon. lord Roſeberry, to Miſs Sukey Ward, of Hanover ſquare.—Thomas Dundas, Eſq; member of parliament for Richmond in Yorkſhire, to Lady Charlotte Fitzwilliam.

DEATHS. Miſs Frances Templeman, only daughter of Dr. Templeman.—The Lady of Samuel Whitebread, Eſq; at his houſe in Chiſwill-ſtreet.—Dr. Cobden, Archdeacon of London, &c.—The Right Rev. Dr. Richard Oſbaldiſton, lord biſhop of London, &c.—— The Lady of the right hon. the lord viſcount Folkſtone.—Mr. George Ring, one of the caſhiers of the Bank.——The Lady of Sir Charles Hotham, bart.—Mrs. Smithſon, mother to the Earl of Northumberland.—The Right Worſhipful Sir Edward Simpſon, dean of the Arches Court of Canterbury, &c.—— Henry Pujolas, Eſq; Somerſet Herald.

ECCLESIASTICAL PREFERMENTS. The Rev. Dr. Jortin, to the archdeaconry of London.—The Right Rev. Dr. Richard Terrick, tranſlated from the See of Peterborough, to that of London.——The Rev. Dr. Lamb, dean of Peterborough, appointed biſhop of that Dioceſe.—The Rev. Mr. Hotham, chaplain to his majeſty, to the Archdeaconry of Middleſex.

PROMOTIONS. George James Bruere, Eſq; to be governor and commander in chief of the Bermuda or Summer Iſlands in America.—— Meſſ. Jewſon and Thompſon to be Caſhiers of the Bank —Robert Lord Clive to the rank of Major General in the Eaſt Indies only.—William Chetwynd, jun. Eſq; appointed keeper of his majeſty's Tennis Courts.—— Mr. Thomas Ravenhill, of the Poſt Office, to be clerk of the Weſtern Road.——Mr. Serjeant Burland, appointed King's Serjeant. —Richard Clayton, Eſq; King's Counſel.

B——KR——TS.

April 28. Peter Nichols, late of Warrington in the county of Lancaſter, Hoſier.—Jonathan Harriſon, of Mary-Port in the county of Cumberland, Dealer.—Jane Cox, of Lombard-ſtreet, London, milliner and ſole trader, wife of John Cox, hatter.

May 1. Robert Dickſon and William Forbes, of Milk-ſtreet, London, merchants.—— John Gembell, of Knuttesford in Cheſhire, linen draper.—Benjamin Hill, of Greaſbrough in Yorkſhire, cordwainer.—John Siddall, of Bingley in Yorkſhire, ſcrivener.

5. Thomas Cooke and Joſhua Cooke, of St. Andrew's Holbourn, cabinet-makers and copartners.—Edward Milles, of Old Bethlem, ſurgeon and apothecary.—Matthew Mathe, of Wellingborough, in the county of Northampton, dealer in linen and Hairſeller.—— Nehemiah Champion, of Briſtol, merchant.

8. William Kinloch and George Biſhop, of Cow-lane, Weſt Smithfield, druggiſts and partners.—John Baptiſt Durand, of Great St. Helen's, merchant.—Henry Hohling, jun. of the Precinct of St. Catherines near the Tower of London, Biſcuit-baker.—Thomas Rothwell, of Bolton in the Moors in Lancaſhire, dealer.—Francis Mac Namara, of Briſtol, Mariner.—Thomas Smith of Lewes in Suſſex, carrier.

12. Ezra Waite, of Welbank-ſtreet, St. Mary-le-Bone, builder and carver.——John French of Pope's Head Alley, wine merchant. —John Pare, of Bourn, Lincolnſhire, mercer. —Sarah Haſlen, of Warrington, Lancaſhire, woollen-draper.—Jonathan Sills, of Upper Moorfields, merchant.

15. William Morrow, of Briſtol, linen draper.——Richard Holmes, of St. Clement Danes, Middleſex, Mercer.

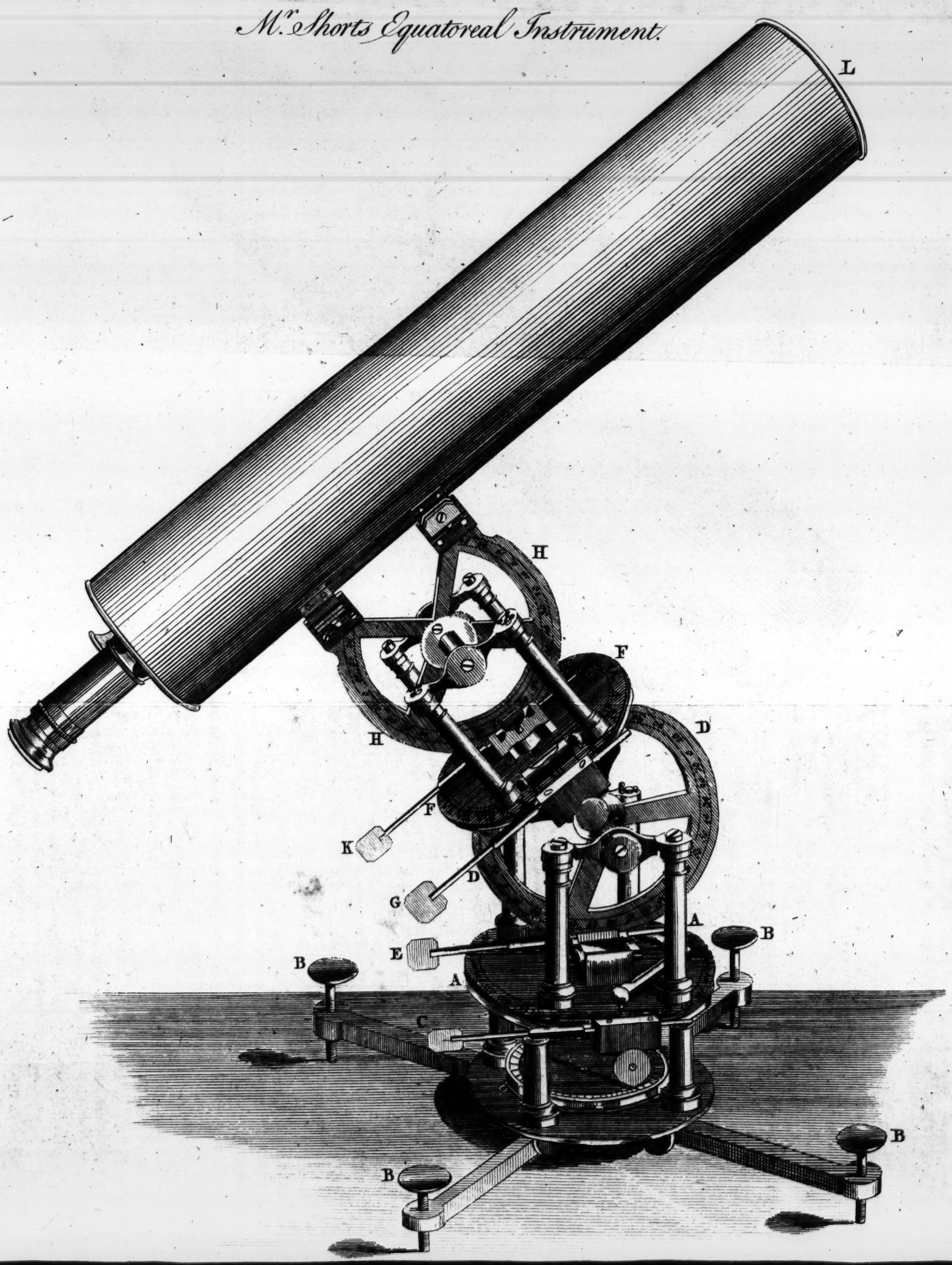
19. Owen Gibbs and Charles Gibbs, of Biſhopſgate-ſtreet, London, Tobacconiſts.—— William Deards, of Pall-mall, jeweller.

22. Thomas Criſpe, of Catherine-court, near Great Tower-hill, London, merchant.— William Griffies, of Liverpoole in Lancaſhire, barber, peruke-maker, and linen-draper.—— John Martin, of Willowhall in Skircoat in the pariſh of Halifax in Yorkſhire, merchant.

26. William Cook, late of Leigh, in Eſſex, dealer.—John Laſſells, late of Little Queen-ſtreet, in the pariſh of St. Giles's in the Fields, Middleſex, coach-maker.—John Hawkin's of Rotherhithe, Surry, merchant.——James Withington, of Rooden Lane, in the pariſh of Preſtwich, Lancaſhire, dealer.

SUPERSEDED; The commiſſion againſt John White of Bramley in Hants, dealer and chapman.

M.r Shorts Equatoreal Instrument.



The GENERAL MAGAZINE,

For JUNE, 1764.

The Deſcription and Uſe of Mr. SHORT's *Equatoreal Inſtrument.*

THIS Inſtrument conſiſts of two circular Planes or Plates A, A, which are ſupported upon four Pillars; and theſe are again ſupported on a croſs-foot or pedeſtal, moveable at each end by the four Skrews B, B, B, B. The two circular plates A, A, are moveable the one above the other, and are called the horizontal Plates, as repreſenting the Horizon of the place; and upon the upper one are placed two Spirit-levels, to render them at all times horizontal: Theſe Levels are fixed at right angles to one another: This upper Plate is moved by a handle C, which is called the horizontal Handle, and is divided into 360 degrees, and has a *Nonius* Index divided into every three Minutes.

Above this horizontal Plate there is a Semicircle D D, divided into twice 90 Degrees, which is called the Meridian Semicircle, as repreſenting the Meridian of the Place, and is moved by a handle E, which is called the Meridian Handle, and has a *Nonius* Index divided into every three minutes.

Above this Meridian Semicircle is faſtened a circular Plate, upon which are affixed two other circular Plates F, F, moveable the one upon the other, and are called the Equatoreal Plates; one of them, repreſenting the Plane of the Equator, is divided into twice twelve hours, and theſe are ſubdivided into every ten minutes of time. This Plate is moved by a handle G, called the Equatoreal handle, and has a *Nonius* Index for ſhewing every minute.

Above this Equatoreal Plate there is a Semicircle H, H, which is called the Declination-Semicircle, as repreſenting the half of a circle of Declination, or horary Circle, and is divided into twice ninety Degrees, being moved by the Handle K, which is called the Declination-Handle. It has alſo a *Nonius* Index for ſubdividing into every three Minutes.

Above this Declination-Semicircle is faſtened a reflecting Teleſcope L, L, of the *Gregorean* Conſtruction, the focal length of its great Speculum being 18 Inches.

In order to adjuſt the Inſtrument for obſervation, the firſt thing to be done, is to make the Horizontal Plates level or horizontal, by means of the two Spirit-levels, and the four Skrews in the Croſs-Pedeſtal. This being done, you move the Meridian-Circle, by means of the Meridian-Handle, ſo as to raiſe the Equatoreal Plates to the Elevation of the Equator of the Place, which is equal to the compliment of the Latitude

(and which, if not known, may likewiſe be found by this Inſtrument, as ſhall be afterwards ſhewn). And thus the Inſtrument is ready for obſervation.

To find the Hour of the Day, and Meridian of the Place.

Firſt find, from aſtronomical Tables or an Ephemeris, the Sun's Declination for the given Time. Then ſet the Declination-Semicircle to the Declination of the Sun, taking particular notice whether it is North or South, and ſet the Declination-Semicircle accordingly.

You then turn about the Horizontal-Handle, and the Equatoreal-Handle, both at the ſame time (looking through the Teleſcope) till you find the Sun perfectly concentrical with the field of the Teleſcope. If you have a clock or watch at hand, mark that Inſtant of time; and by looking on the Equatoreal-Plate, and *Nonius* Index, you will find the Hour and Minute of the Day, which, comparing with the time ſhewn by the Clock or Watch, ſhews how much either of them differ from the Sun or true Time. In this manner you find the Hour of the Day.

Now, in order to find the Meridian of the Place, and conſequently to have a mark, by which you may always know your Meridian again, you firſt move the Equatoreal Plate, by means of the Equatoreal Handle, till the Meridian of the Plate, or Hour-line of 12 is in the middle of the *Nonius* Index; and then, by turning about the Declination-Handle, till the Teleſcope comes down to the Horizon, you obſerve the object or point which is then cut by the interſection of the focal wires in the middle of the field of the Teleſcope; and a ſuppoſed line drawn from the ſaid interſection to that point in the horizontal object, is your Meridian Line. The beſt time of the day for making this obſervation for finding your Meridian, is about three hours before, or as much after Noon. The Meridian of the place may be found ſo exactly by this method, that it will not differ at any time from the true Meridian above ten ſeconds of Time: and if a proper allowance be made for the refraction at the time of obſervation, it may be found much more exactly. This Point or Mark thus found will be of uſe to ſave trouble afterwards; and is indeed the foundation of all aſtronomical obſervations.

To find a Star or Planet in the day Time, even at Noon-day.

The Inſtrument remaining rectified, as in the laſt Experiment, you ſet the Declination-Semicircle to the Declination of the Star or Planet you want to ſee; and then you ſet the Equatoreal-Plate to the Right Aſcenſion of the Star or Planet at that time, and, looking through the Teleſcope, you will ſee the Star or Planet, which having thus once got into the Teleſcope, you cannot loſe it afterwards: For as the diurnal Motion of a Star is parallel to the Equator, by your moving the Equatoreal Handle ſo as to follow it, you will at any time, while it is above the Horizon, recover it, if it be gone out of the field.

The eaſieſt method for ſeeing a Star or Planet in the day-time is this: Your Inſtrument being adjuſted as before directed, you bring the Teleſcope

leſcope down ſo as to look directly at your Meridian-Mark, and then you ſet it to the Declination, and Right Aſcenſion, as before mentioned.

By this Inſtrument moſt of the Stars of the firſt and ſecond Magnitude have been ſeen, even at Mid-day, and the Sun ſhining bright; as alſo *Mercury*, *Venus*, and *Jupiter*: *Saturn* and *Mars* are not ſo eaſy to be ſeen on account of their feebler light, except when the Sun is not far above the horizon.

And in the ſame manner in the Night-time, when you can ſee a Star, Planet, or any New Phenomenon, as a Comet, you may find its Declination and Right Aſcenſion immediately, by turning about the Equatoreal-Handle, and Declination-Handle, till you ſee the Star, Planet, or Phenomenon; and then, looking upon the Equatoreal-Plate, you find its right Aſcenſion in Time; and you find, upon the Declination-Semicircle, its Declination in Degrees and Minutes.

In order to have the other uſes of this Inſtrument, you muſt make the Equatoreal Plates become parallel to the Horizontal Plates; and then the Inſtrument becomes an *Equal Altitude Inſtrument*, a *Tranſit Inſtrument*, a *Theodolite*, a *Quadrant*, an *Azimuth Inſtrument*, and a *Level*. The manner of applying it to theſe different purpoſes is too obvious to need any Explanation.

As there is alſo a box with a Magnetic Needle faſtened in the lower Plate of this Inſtrument; by it only you may ſet it nearly in the Meridian: Or if you ſet the Horizontal Meridian, and the Equatoreal Meridian in the middle of their *Nonius* Indexes, and direct your Teleſcope to your Meridian Mark, you may find the Variation of the Needle, by obſerving how many Degrees from the Meridian of Compaſs-box the needle points at.

Of the Preſervation of Pictures painted in Oil.

THE method of preſerving oil paintings, is by coating them with ſome tranſparent and hard ſubſtance, as a varniſh, to ſecure the Colours from the injuries of the Air, or dampneſs and moiſture; and to defend the ſurface from ſcratches or any damages the Picture might receive from ſlight violences.

The ſubſtances that have been, or may be uſed for this purpoſe, are gum Arabic, glair or whites of eggs, iſinglaſs ſize, and varniſhes formed of reſinous gums diſſolved in ſpirit of wine, or oil of turpentine; which laſt, where oil of turpentine is uſed, are called oil varniſhes.

Gum Arabic has been uſed, diſſolved in water, as a varniſh for pictures and paintings, on account of its being both more eaſily laid on, and taken off, than the varniſhes formed of ſpirit of wine or oil of turpentine. It is more eaſily laid on, becauſe it may be made exactly of that degree of viſcidity with which it can be beſt worked with a bruſh or pencil; and becauſe it is totally free from that accident called *chilling*, which attends all varniſh made with ſpirit of wine. There is however

along with theſe, another quality of ſo bad a kind, that its effects more than countervail theſe advantages in the uſe of gum Arabic, as a varniſh for paintings; which is, that as it dries, it is extremely apt to crack, and give ſuch appearance of flaws and ſcratches, as obſcure and deform the painting to an intolerable degree; and therefore this gum is at preſent much rejected with reſpect to this application, and the ſubſtance we ſhall next conſider ſubſtituted in its place. The addition of ſugar or ſugar-candy will greatly prevent the cracking of gum Arabic; but then it gives a viſcidity or ſtickineſs to the gum, that makes the ſurface of the painting ſully, and is in a manner equally detrimental with the cracking of the gum.

Glair of eggs beat to an unctuous conſiſtence, and ſpread with a proper bruſh over the paintings, anſwers much the ſame end as gum Arabic, but has the like advantages with much leſs of the bad quality of cracking; for which reaſon it is generally preferred to that gum. It has nevertheleſs one great defect, which is its not laſting; for it requires to be renewed frequently as either moiſture or a great dryneſs of the air injure it. It is uſual to mix a little brandy or ſpirit of wine with the glair, in order to make it work more freely with the bruſh; as alſo a lump of ſugar to give it more body, and prevent its cracking; from which, after all, it will not be entirely free, after it has laid ſome time on, if the picture be put into a very dry place.

Iſinglaſs ſize may be uſed in the ſame manner as the ſolution of gum Arabic or the glair or eggs, for a varniſh; and if a little honey or ſugar, about a fourth or fifth part of the weight of iſinglaſs, be added to it, it will cover more effectually than either of them, and yet be free from cracking. This is not, however, ſo laſting a varniſh as the reſinous gums, eſpecially if the picture be left in a damp ſituation; and indeed in all caſes it is apt to turn very yellow with time: but where there is a proſpect of having occaſion to take off the varniſh for altering the painting, this will be found a very good one, as it may be entirely removed by means of a ſponge and hot water.

There have been many compoſitions invented for ſpirit and oil varniſhes for paintings: But the multiplying a number of ingredients in ſuch compoſitions is by no means attended with advantages that are equivalent to the trouble. I will, however, give one of the applauded recipes of each kind; and then ſubjoin another more ſimple, which I believe will better anſwer the purpoſe.

" Take gum ſandarac half a pound, of Venice turpentine one " ounce and half, of the gums animi and copal each three quarters of " an ounce, of maſtic half an ounce; of Benjamin, gum elemi, " and white roſin, each two drachms; of rectified ſpirit of wine, one " pound. Powder the Benjamin and gum animi, and put to them and " the Venice turpentine, contained in a proper ſized phial, eight ounces " of the ſpirit of wine; to the copal and roſin powdered, put, in like " manner, in a phial, ſix ounces. Let them ſtand, ſhaking the

" phials

" phials frequently, till the gums, &c. be diſſolved. Then ſtrain all " the ſolutions through a piece of fine linen into one bottle; and after " the mixture has ſtood ſome days, decant off as much as will ſeparate " clear, and keep it in a bottle well ſtopt, for uſe."

Some omit the copal, which is, in fact, ſo much the ſame with the animi, that there is no certain diſtinction known, and put in its place gum ſarcocol: but it is not of any conſequence, which is admitted; nor whether three parts in four of the ingredients be rejected; for the following will anſwer the end equally as well.

" Take of the gums maſtic and ſandarac, powdered groſsly, each ſix " ounces, of Venice turpentine half an ounce; diſſolve them in a quart " of highly rectified ſpirit of wine, and ſtrain off the ſolution, as the " above. If this be wanted harder, an equal weight of the gums animi " and copal may be added, and the quantity of ſpirit of wine doubled."

In the uſing this kind of varniſh, great care muſt be taken that the picture receive no damage from it: for the diſſolving power of the ſpirit of wine will ſometimes reach the oil of the painting, and conſequently diſturb the colours.

The varniſh ſhould, therefore, be ſpread with as little, and as gentle work of the pencil as poſſible; and care ſhould be taken, likewiſe, that the painting be thoroughly dry before the operation is attempted. There is alſo another nice circumſtance to be attended to in the uſe of this kind of varniſh, which, is to avoid what is called *the chilling of it*; which will certainly happen, if the varniſh be not laid on in a very warm place, or the picture itſelf warmed to a moderate degree: and this will be ſtill more liable to happen, if the ſpirit of wine employed, be not very highly rectified. If the varniſh appear to be *chilled* (that is when the parts of the gums do not attract each other, but precipitate from the phlegm left by the ſpirit on its evaporating away, in the form of a powder, which gives a miſty turbid appearance to the ſurface, inſtead of a tranſparent ſhining one) another coat ſhould be laid over it, which will in general remedy the miſchief; and indeed leſs than two or three coats of this kind of varniſh is not ſufficient to preſerve the painting, and bring out the effect of the colours; if they are in that ſtate called *ſunk in*, occaſioned by the attraction of the cloth on the oils mixed with them.

The following is a recipe for an oil of turpentine varniſh of the more compound kind.

" Take of the gums maſtic and ſandarac, each four ounces, of " white roſin two ounces, of the gums ſarcocol, animi, copal, and " olibanum, each one ounce. Powder them groſsly; and put them " into a phial with two pounds of oil of turpentine: ſtop the phial, " but not too cloſe, leſt it burſt; and place it in any heat, the greater " the better, under that which will make it boil. Let it ſtand there " till the gums be diſſolved, or at leaſt ſo much of them as will diſſolve, " then ſtrain off the ſolution for uſe."

The

The ingredients, except the maſtic and ſandarac, may be omitted at diſcretion: and with reſpect to the gums animi and copal, under which names a variety of gums brought from the Eaſt and Weſt-Indies, as well as Africa paſs, there are a very few parcels which will be found to diſſolve in oil of turpentine. Indeed I have never found any that would be ſo diſſolved: but recipes like this have been given upon very good authority. The following however will be found a much cheaper, leſs troubleſome, and equally good varniſh with that made by this complex mixture.

"Take of gum ſandarac two ounces, of maſtic and olibanum each "an ounce and half; or three ounces of maſtic, and Venice turpen-"tine half an ounce: powder them all, and diſſolve them in half a "pound of oil of turpentine; proceeding as in the above."

When this kind of varniſh is uſed, it is particularly neceſſary that the painting ſhould be thoroughly dry, and the pencil uſed as gently and ſparingly in the laying it on as poſſible, for the oil of turpentine is extremely ready to diſſolve the oil of the painting, if it be the leaſt within its power: on which account the varniſhes of this ſort are much leſs uſed now than formerly. This varniſh however will ſpread more eaſily than that with ſpirit of wine; and is not ſubject to chill, even though it be laid on without the aid of any warmth: but it is proper nevertheleſs to be very careful that there be no damp or moiſture on the ſurface of the painting; which would prevent the varniſh from taking hold, and wholly fruſtrate the intention of it.

Varniſhes have been uſed likewiſe, formed of the gums ſandarac, olibanum, and Arabic, with white roſin and turpentine, diſſolved in linſeed-oil; but they are greatly out of uſe now, as ſuch varniſhes are ſlow in drying; and the linſeed-oil will turn yellow; beſides the diſadvantage of the impracticability of even taking them off the painting again, whatever occaſion there may be for it. But a very ſecure varniſh may nevertheleſs be made by diſſolving two ounces of ſandarac and olibanum, with half an ounce of Venice turpentine, in half a pound of old nut or poppy oil which is white; and if too fat for other uſe, the better.

All theſe varniſhes muſt be carefully laid on with a pencil or bruſh, according to the circumſtances before intimated to be proper for each kind: but with reſpect to thoſe made with ſpirit of wine or oil of turpentine, particular care muſt be taken not to paſs the pencil or bruſh more than once over the ſame place: for otherwiſe it will produce ſtreaks and inequalities which ſpoil the effect.

Painting in miniature are preſerved by means of plates of glaſs, or the talk called inſinglaſs, placed in the frame before them. There is no particular method to be obſerved in doing this, but to make the frame ſo compact, that the air may have no acceſs; which otherwiſe will ſometimes prey upon the colours.

Paintings in freſco, where they are of conſequence enough to merit ſuch care, may be rendered more durable, and preſerved from foulneſs, by

The little Zursak.

by varniſhing them with hot ſize boiled to a ſtrong conſiſtence, in which a fifteenth or twentieth part of honey has been diſſolved.

Paintings in varniſh require no means of preſervation, but from violence; the varniſh itſelf being a ſufficient defence of the colours againſt the air, moiſture or all other ſubſtances that might affect them.

Crayons muſt be preſerved as paintings of water colours, by plates of glaſs and inſinglaſs. There have been many experiments made to diſcover a method of varniſhing and giving adheſion to the colours, to prevent their being ſo eaſily rubbed off, with the leaſt briſk motion: but the ſucceſs has not hitherto been ſuch as makes it material to communicate the particulars of them here.

Obſervations on the ANIMAL KINGDOM. *Tranſlated from the Latin of Dr.* LINNÆUS.

1. ZOOLOGY (or the Hiſtory of Animals) though the nobleſt part of Natural Hiſtory, is yet by far leſs cultivated, than the other two parts of it. Nevertheleſs, if we give attention to the motion, or the mechaniſm, or the external and internal Senſes, or laſtly the excellent figure of Animals, we cannot but be ſatisfied that they are the ſublimeſt and moſt perfect works of the Creator.

2. If we well examine into the Zoologys of Authors, we ſhall find them, for the moſt part, to be no other than fabulous accounts delivered in a diffuſe ſtyle, with imperfect yet tedious Deſcriptions, and figures ill deſigned. Few have attempted to digeſt Zoology into *Genera* and *Species*, according to Syſtematical laws, if we except *Willoughby* and *Ray*.

3. On which conſiderations, and with the aſſiſtance of all the obſervations I had been able to give my occular teſtimony to, I undertook to write my Syſtem of Zoology. In the *Tetrapodology* (or Hiſtory of Quadrupeds) I have chiefly deduced the Orders of the Animals from the Teeth; in *Ornithology* (or the Hiſtory of Birds) from the figure of the Beak; in *Entomology* (or the Hiſtory of Inſects) from the *Antennæ* and Wings, *&c.*

4. In *Icthyology* (or the Hiſtory of Fiſhes) I have retained the method of my deceaſed friend and moſt excellent Icthyologiſt, Mr. *Peter Arted*, a *Swede*, who had not his equal in diſtinguiſhing the Natural *Genera* of Fiſhes, and the differences of their *Species*. I publiſhed his poſthumous works at *Leyden* in *Holland*, in the year 1747.

5. Some there are who hold *Zoology* to be of leſs *utility* than the other parts of Natural Hiſtory, eſpecially as to what concerns the ſmalleſt kind of Animalcules. But were we to conſider the Miſchiefs, Benefits and Properties of the Inſects hitherto known; the great and important utility likely to be derived from a knowledge of the Properties of thoſe which we are not ſo well acquainted with, would obviouſly appear.

6. The Miſchiefs (5) produced by Inſects are manifeſt beyond all contradiction: For example, the *Finland* and *Ruſſian Blatta* (or Moth) devours

vours bread and cloathing of every kind; inſomuch as to compel numbers of families in the ſevereſt winters, to quit their houſes till theſe inſects are deſtroyed by the cold. The *Oeſtrum Lapponicum* (or *Lappland* Gad-fly) deſtroys about a third part of their young Rain-deer and cattle. Mariners are but too ſenſible of the damage done by the *Teredo Navium* (or Ship-worm.) How inſufferably troubleſome the Gnats are to both Man and Beaſt in divers provinces bordering upon *Lappland*, can ſcarce be expreſſed. The diſagreeable noiſe of the *Grillus domeſticus* (or Houſe-cricket) that dwells in walls, leads the inhabitants many a tedious and ſleepleſs night. The *Muſcæ domeſticæ* of the *Norwegian Finmark* fill whole houſes, and leave nothing untouched, as I myſelf experienced in my *Lappland* Journey. What plagues *Fleas* are to the female ſex, and *Lice* to Mariners and Soldiers, is moſt notorious. No leſs are Quadrupeds, Birds, Fiſhes, Plants, and even inſects infeſted with Lice, proper to their ſeveral ſpecies. The *Acari*, (or Mites) ſome of the ſmalleſt of Animalcules, are frequently the cauſe of *Exanthæmata* and puſtules in the human body. What a deſtruction of Vegetables was wrought a few years ſince in ſome parts of *Europe*, by ſwarms of the *Grylli Africani* (or *African* Locuſts.) And what a conſumption do the *Larvæ Phalænarum* make of the leaves of trees every year. The gardiners can inform you of the number of tender embryos of plants deſtroyed by the *Mordella* early in the ſpring. The *Dermeſtes* gnaws and ſpoils the more valuable Skins of beaſts and birds. The *Oeſtrus bovinus* (or Ox Gad-fly) is exceedingly troubleſome to hard driven cattle, in the ſummer ſeaſon. How many of the human ſpecies have ſuffered death by Spiders and Scorpions, or run mad through the bite of a *Tarantula*, the obſervations of phyſicians do ſufficiently teſtify.

7. The great Benefits (5) which accrue to the art of Dying, from the *Coccinella* (or Cochineal) the *Kermes*, the *Coccus*, and the Galls produced from Ichneumons, the uſe of *Cantharides* (or *Spaniſh* Flies) in Surgery, of the *Meloe* in Medicine, of the *Bombyx* (or Silk-worm) in the art of Weaving, of the Honey of Bees in Oeconomy, &c. is univerſally underſtood.

8. Whoever ſets about a curious examination of the *Properties* of Inſects muſt needs be affected with a ſingular pleaſure, by giving due attention to the *Proboſcis* of the *Curculio*, the Horns of the *Lucanus*, the *Antennæ* of the *Cerambyx*, the joints of the *Meloe*, the Wings of the *Forficula*, the Plumage of the *Papilio*, the Eyes of the *Tabanus*, the Ventricle of the *Ricinus*, the *Aculeus* of the *Crabo* (or Hornet,) the colour of the *Cantharis* (or *Spaniſh* Fly,) the ſpringineſs of the *Elater*, the Noiſe of the *Gryllus* (or Cricket,) the Scent of the *Cimex* (or Bug,) the Minuteneſs of the *Acorus* (or Mite,) the manner of Copulation of the *Libellulæ*, the Neſt of the *Ichneumon*, the Cells of Bees, the Winter-quarters of the *Oëſtrum*, the Neſt of the Waſp, the ſhell of the *Eremita* (or Hermit,) the Life of the *Ephemera*, the Courſe of the *Gyrinus aquaticus* (or Tadpole,) the ſhining Light of the *Lampyris* (or Glow-worm,) the ſparkling of the *Scolopendra*,

Scolopendra, the Renovation of the Crab, the ſpiral motion of the *Eruca aquatica ex Muſcâ cæruleâ proveniens*, the almoſt indeſtructible life of the *Eruca aquatica*, and the metamorphoſes of almoſt all inſects, with many other particulars mentioned in my *Oration on the Properties of inſects*, publiſhed at *Stockholm* in 1739 and 1747, 8*vo*.

9. The Eggs of many Inſects are incloſed in a triple Integument. When the firſt Integument is removed it is called *Larva*, the ſecond *Pupa*, and the third the perfect *Inſect*; hence ariſes a triple excluſion of the *Pullus*.

10. In the human inteſtinal Tube are found three Species of Animals, The *Lumbrici* (or common Worms,) the *Aſcarides*, and the *Tænia* (or Tape-Worms.) That the *Lumbricus* of the Inteſtines is of the ſame ſpecies as the common Earth-worms appears from the figure of all its parts. That the *Aſcarides* are the ſame as the ſmall worms which abound in marſhy places, may be proved by inſpection. The *Tænia* has hitherto been taken for a paraſitical Species, being ever found ſolitary in Men, Dogs and Fiſhes, which has greatly perplexed thoſe who have taken upon them to explain the generation of Animals. However I myſelf (in my *Rutherholmian-Dalekarlic* Journey, 1734) with ſeven of my Companions, found it in the acidulous Ochre of *Færenſk*, which greatly ſurprized me, as many have attempted to expel this worm with mineral waters. Hence it ſhould follow that worms proceed not originally from the Eggs of Inſects, ſuch as Flies, &c. (for indeed if they did, they could by no means be multiplied in the inteſtinal Tube, but would decreaſe according to the proportions of their metamorphoſis), but from the Eggs of the afore-ſaid worms, ſwallowed with water as a drink; whence it follows that the remedies againſt Inſects, cannot be depended upon for the deſtruction of worms.

11. The Eſſential Generical Character of *Quadrupeds*, is to be ſettled from the Teeth; of *Birds*, from the Beak; of *Fiſhes*, from the *Membrana branchioſtiga* (or the Membrane which covers the Gills;) of Inſects, from the Mouth; of teſtaceous worms from the living inhabitants. Now whoever purpoſes to promote this Branch of Natural Knowledge, ſhould conceive himſelf tied down to an exact deſcription of theſe ſeveral parts.

Preparation of ivory for a ground for miniature painting.

"TAKE the ivory leaves, or tables on which the painting is to be made; and, having cleanſed them, rub them over with the juice of garlick."

This takes off that greaſineſs, which is ſo often much complained of, as preventing the colours from taking on the ground: and which is not otherwiſe to be remedied by the uſe of ſope, or even gall. It is, however, effectually removed by this expedient, which was imparted to a gentlemen, by a lady eminent for her painting in this way in Italy.

Of the little ZURSAK.

THIS fruit is called at Surinam *little* **Zurſak*. The plant grows like a tree, and yields a bad and uſeleſs fruit, which is yellow on the outſide, and filled in the inſide with black kernels and a white pith.

In the month of Auguſt, 1700, I found upon this tree the beautiful green caterpillar which is ſeen here. I fed it with the leaves of the ſame tree till the 18th of Auguſt; and after having changed its ſkin, it was transformed into a brown *nympha*, from which on the 12th of September came out a †*nocturnal* butterfly, black and white, ſuch as it is here repreſented. This ſort of butterflies have a double trunk, which they diſpoſe in ſuch a manner for to ſuck the honey of flowers, that it ſeems to be only a pipe through which they receive their food; after which they fold up again this trunk, and hide it under the hair of their head ſo that one can hardly diſcover it. They fly only by night, are briſk, and live a long time. If one examines them with a microſcope the fine duſt which covers their wings forms upon them feathers like thoſe of a ſpotted hen; the whole body and all above the eyes is as hairy as a bear. The trunk of the butterfly reſembles the throat of a duck or a gooſe; and its feet and horns are very beautiful.

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ſtatue or picture has no intrinſic beauty in itſelf, but is relative to another object, the ſimilitude to which is made the *Venus* of the *Art*; the thing therefore repreſented regulates our eſteem. Whence then does *that* derive this primary excellence? From itſelf without any reference to remoter Beings? No, certainly. Every object round has a ſhare, and it is more or leſs good and beautiful, at it correſponds to them, and they to others to infinity. Whatever then is proportionable and harmonious, is good; every thing that is ſo is natural; we judge of beauty by nature, conſequently *Good* and *Beauty* are the ſame. Thus we form our opinion of an image. Every limb and feature ought to agree with the whole in ſize, age, ſex, *&c.* and this is called *Symmetry*; this ſymmetry is moſt perfect when made for the uſe and ſtrength of the ſpecies, and that uſe produces beauty. It is the ſame not only through all the arts and original objects of nature, but may be perceived too in characters, and manners; for what is virtue but moral proportion, and the juſt performance of the part in ſociety aſſigned you to act without diminution or addition? Every one who forms his life upon this plan, may truly be ſaid, without ſtraining language, to live *beautifully*. It now remains to be enquired, though *Good* and *Beauty* are the ſame, why they affect the mind with pleaſure, and from whence ariſes that diſguſt at evil and deformity; for there is in both caſes an inſtantaneous effect excluſive of reflection. There is in human nature a power independent of the reſt, called the *internal ſenſe*, all perfect and harmonious, which, as it proceeds from the fountain of good, remains for ever pure and untainted. *External beauty*, being the infallible and inſeparable companion of good, bears a fraternal likeneſs to that mental comelineſs or order; and as a note on one lute being touched, the uniſon of another tho' unmoved will anſwer to it, ſo the ſimilar perfection within is reſponſive to that outward proportion; and diſguſt in like manner is created by an analogous diſcord that *evil* and *Deformity* bear to the virtuous and beautiful propenſity of the ſoul. I doubt not but it will be objected, that there are many who deviate from this rule in their actions, to whom vice in morals, and monſtrous appearances in nature, ſeem delightful. But let us conſider, that this proceeds from the deception of *Fancy*; the *internal ſenſe* alway judges right according as things are repreſented; and it would be as juſt to blame the natural eye, when (as we read in fabulous accounts) it miſtakes a deſart for a paradiſe, converted by a magician, as to think the intellectual one deficient, when deceived by that ſorcereſs; for by her wand the monſtrous is changed into the wonderful and new, and vice becomes eaſe, pleaſure, and power. I ſhall have recourſe to the following fable more fully to illuſtrate theſe truths.

As the human Soul was juſt entered into that ſtate we call Life, and was wandering in ſearch of Happineſs, two females appeared of different forms. The one was called Evil or Deformity, the daughter of CHAOS, the offspring of the furies; the other Good or Beauty, the daughter of nature, the offspring of the Gods. The former, to conceal the uglineſs of her perſon had borrowed all the ornaments PLUTUS could beſtow, and was aſſiſted by a deluſive glaſs that Fancy held before her. The latter wore the garments of Simplicity, and was ſupported by Truth. As ſoon as the firſt ſaw the young ſtranger, ſhe ran and addreſſed him in the following manner: "How fortunate, O youth, are you to meet me, who am come

to conduct you to the palace of Happineſs! In yonder plain, where all the riches of the eaſt are laviſhly beſtowed, the goddeſs reſides; ſhe is conſtantly attended by the Loves and Graces, and their mother, the fair VOLUPIA, offers her downy couch to the votaries to reſt on, whilſt BACCHUS preſents his cup of delight: Power ſtands at her right hand, and Grandeur at her left, and the Frowns of Care, and Wrinkles of Induſtry, are baniſhed the joyful regions." When ſhe had done ſpeaking, the youth turned his eyes and beheld a ſtately building of an Aſiatic order; ſatyrs, mermaids, and beaſts of heterogeneous kinds ſupported the roof, and all the ornaments were ſuch as never exiſted but in a wild dream. But what attracted his attention the moſt, was the inebriated pleaſure that appeared through the vaſt concourſe of people of all ſorts that attended the pretended deity; ſome expreſſed uncommon tranſport in the poſſeſſion of a ſceptre, others ſhewed ſigns of greater rapture in the arms of a beautiful woman, and many yawned out a more indolent ſatisfaction in a poſture of repoſe. As he was beholding this group of figures, the other female came up, and ſeeing him not a little pleaſed with his proſpect, "Behold, ſaid ſhe, I am the only parent of happineſs; let not the falſe appearance of that impoſture delude you into miſery." Upon ſaying which, her attendant Truth ſtruck the palace with her wand, whoſe touch no falſhood can bear, and immediately the ſtately domes were turned into a frightful ruin; what before appeared the reſidence of Pleaſure, ſeemed then the court of Diſeaſe; the laughs of riot became the groans of anguiſh; Power, that looked ſo alluring and majeſtic, was ſunk into Tyranny, with ſcorpions in her boſom that ſtung her to diſtraction; all the reſt underwent an equal change, and appeared in their proper ſhapes. The youth immediately abaſhed and frightened, fled from this horrid company, and ſought for ſafety in the arms of his Protectreſs, who taking him by the hand, and chearing him with her ſmiles, reſumed her ſpeech to him as follows: "See, ſaid ſhe, the inchantreſs and her helliſh crew are vaniſhed, there is nothing more to fear. I am the guardian genius of this place, and never fail to guide thoſe who ſeek me, to the temple of true Happineſs. That goddeſs is not attended, as you lately imagined, nor ſurrounded by noiſe and riot, but ſits enthroned in the ſilent vale of ſolitude, where Peace and Comtemplation adminſter unto her, and the lawrelled ſiſterhood of Art and Science celebrate her praiſe. There the lovely family of Social Virtues dwell, and their great parent Charity, perpetually exerciſes them in their heavenly duty; Health and order guard the altar, and Content offers the balm of bliſs to all the votaries.

Of the Principle of Coheſion in Bodies, with a particular View to Medicine.

MR. MACBRIDE, an eminent and learned Surgeon, has juſt now favoured the Publick with a ſet of Eſſays, five in Number, on Subjects greatly intereſting to Medicine and Natural Philoſophy; the general purpoſe of which, he acquaints his Readers, is to ſhew, that there is *another Principle in Matter*, beſides thoſe that are commonly received; and that it is upon this Principle, forming the Cement or Bond of Union, that the Firmneſs, Sound-

Soundneſs, and perfect Coheſion of Bodies, chiefly depend.

It being the Author's Intention to apply this Doctrine particularly to Medicine, he begins his Inveſtigation by tracing the Progreſs of Digeſtion, and ſhewing that the Principle above hinted at is received into animal Bodies by the way of the chyliferous Canals; and this makes up the Subject of his firſt Eſſay, and of ſome part of the ſecond.

This Point being proved by a number of Experiments, and illuſtrated by ſome practical Obſervations, he goes on to ſhew, from Experiments alſo, that animal Subſtances become putrid, from the loſs of the abovementioned Principle; ſeeing that Putrefaction is found to ariſe from the Reſolution and Diſunion of the ſeveral conſtituent Particles; and he offers a new Theory for explaining the immediate Cauſe of that Degree of Putrefaction, which often takes place in the living Body. Here an Opportunity is taken of introducing ſome Experiments, in order to determine whether or not putrid animal Subſtances are to be regarded as alcaline: and it appearing from theſe, that ſuch Subſtances are in reality of an alcaline Nature, and that ſome Writers of very great Note have been miſ-led into a contrary Opinion, probably from obſerving that Alcalies reſiſt Putrefaction; he then proceeds in his third Eſſay, to examine, experimentally, the Power of Antiſeptics in general; and finds that this depends, for the moſt part, on reſtraining the Flight of the Cementing Principle.

An Enquiry then commences concerning the Power of different Things to reſtore Soundneſs and Sweetneſs to Subſtances already putrid: and it is ſhewn, likewiſe from Experiments, that this may be accompliſhed by reſtoring the Cementing Principle.

This naturally leads him to a Conſideration of the moſt effectual Method of curing putrid Diſeaſes, which he alleges to depend greatly on the application of ſuch Things as are known to be capable of furniſhing a large Portion of the Principle ſo often mentioned; and this is particularly exemplified in the Cure of the Sea-ſcurvy: a Diſeaſe wherein the Maſs of Fluids is evidently in a ſtate of Putrefaction.

In conſequence of this Hypotheſis he advances a propoſal for trying new Methods to prevent or cure the Scurvy at Sea; and this affords Matter for the fourth Eſſay, to which is annexed a very accurate account of that moſt deſtructive Diſeaſe extracted from the Writings of JOHN WOODALL, an old *Engliſh* Surgeon whoſe Works ſeem, he ſays, to be but very little known. WOODALL's Deſcription runs thus,

" The Signs of the Scurvy are " many; as, namely, a general " Lazineſs and evil Diſpoſition of " all the Faculties and Parts of the " Bodie, ſaving the Stomach and " Appetite, which ſometimes is " greater than ordinarie, with them, " for a long Time.

" A Diſcolouring of the Skin, as " it were fouler than ordinarie, with " Spots darker-coloured than the " reſt, and ſometimes alſo darkiſh-" blue Spots

" A Fever at Sea commonly ends " in the Scurvy; wherefore, be-" ware of too large Bleeding, which " oft increaſeth the Griefe and " maketh it incurable.

" Alſo Itching, and Aching of " the Limbs, are Signs of the Diſ-" eaſe.

" Sometimes, alſo, the Legges " falling away and drying, and the " Calves of the Legges growing " hard and dry; as alſo immode-" rate Swellings of the Legges.

" Alſo the Legges and Thighes " diſcoloured into Frekells or Spots, " of a dirty-brown, ſad Colour,

" much

" much like the Colour of a gan-
" grenated or mortified Member.
" Stinking Breath, greate Ob-
" ſtructions of the Liver, or Spleene,
" or both; and, in the Exerciſe of
" their Bodies, their Limbs and
" their Spirits failing them.
" Shortneſſe and Difficultie of
" Breathing, eſpecially when they
" move themſelves; but lying ſtill,
" find little Griefe or Paine.
" Their Eyes of a leady Colour,
" or like dark Violets.
" Great Swellings of the Face,
" Legges, and all over the Body;
" Paleneſs, or a foul pale Colour
" in the Face; Swellings in the
" Gums, Rotteneſſe of the ſame,
" with the Iſſueing of much filthie
" Blood, and other ſtinking Cor-
" ruption thence; Looſeneſſe of the
" Teethe: Alſo ſome are troubled
" with extreme Coſtiveneſs, that,
" for fourteen Days together, they
" go not to Stoole once; alſo many
" have Stoppings of the Urine, or,
" at the leaſt, making leſs Water
" in two Days than the Partie drink-
" eth in one.
" A Coldneſſe and Stiffeneſſe of
" the ſinewey Parts, chiefly of the
" Legges. Some alſo have their
" Muſcles, yea, and the Sinewes
" of their Thighes, Arms, and
" Legges, ſo waſted away, that
" there ſeemeth to be left only the
" Skin covering the Bones.
" Alſo it is manifeſt, that diverſe
" of thoſe which have been opened
" after Death, have had their Li-
" vers utterly rotted; others have
" had their Livers ſwoln to an ex-
" ceeding Greatneſſe; ſome, the
" Spleene extremely ſwolne; others
" have been full of Water; others
" have had the Lungs putrified,
" and ſtunk whilſt they have lived.
" Theſe, and diverſe other Signes,
" too many for to be mentioned
" here, do afflict poor Seamen, which
" are often paſt Man's Helpe, in
" ſuch Time and Place as they hap-
" pen; the Cure thereof reſteth in
" the Hands of the Almightie."

This Extract (ſays Mr. *Macbride*) proves *Woodall* to be a Man of ſome Obſervation.

His fifth Eſſay contains a Number of miſcellaneous Experiments and Obſervations, all tending to a further Proof of what had been advanced in the four preceding ones; and concludes with laying down eaſy and expeditious Methods of diſſolving in Water, Camphor, and all Kinds of reſinous Subſtances.

The Author, with a truly generous and laudable Candour, finally obſerves; that the Foundation of the foregoing Doctrine having been laid near forty Years ago, by the celebrated Doctor Hales, and, of late, much improved by Doctor Black, Profeſſor of Medicine of Glaſgow, it will be proper that the Reader be thoroughly acquainted with the Analyſis of Air, in the firſt Volume of *Hales*'s Staticks; and with the Experiments on *Magneſia*, in the ſecond Volume of the *Edinburgh* Phyſical and Literary Eſſays; as alſo with the Experiments made by Doctor Pringle, which are to be found in the Philoſophical Tranſactions, or in the Appendix to that learned Phyſician's Obſervations on the Diſeaſes of the Army; theſe Eſſays being deſigned as a Sequel to all the three Writers juſt now mentioned.

A Specimen *of* ancient Welsh Poetry.
Tranſlated by the Rev. Mr. Evan Evans.

A Poem *compoſed by Owain Cyveiliog, prince of Powys, entitled by him* Hirlas, *from a large drinking horn ſo called, uſed at feaſts in his palace. He was driven out of his country by Owain Gwynedd, prince of North-wales, and Rhys-ap-Griffith-ap-Rhys-ap-Tewdwr, prince of South Wales, A. D.* 1167, *and recovered*

vered it, by the help of the Normans and Engliſh, under Henry the ſecond. He flouriſhed about A. D. 1160, *in the time of Owain Gwynedd and his ſon David. This poem was compoſed on account of a battle fought with the Engliſh at Maelor, which is a part of the counties of Denbigh and Flint, according to the modern diviſion.*

WHEN the dawn aroſe, the ſhout was given; the enemy gave an ominous preſage; our men were ſtained with blood, after a hard conteſt; and the borders of Maelor Drefred were beheld with wonder and aſtoniſhment. Strangers have I driven away undaunted from the field with bloody arms. He that provokes the brave man, ought to dread his reſentment.

Fill, cup-bearer, fill with alacrity the horn of Rhys, in the generous prince's hall; for Owen's hall was ever ſupported by ſpoils taken from the enemy; and in it thou heareſt of the relief of thouſands. There the gates are ever open.

O cup-bearer, who, with patience, mindeſt thy duty, forſake us not; fetch the horn, that we may drink together, whoſe gloſs is like the wave of the ſea; whoſe green handles ſhew the ſkill of the artiſt, and are tipped with gold. Bring the beſt meath, and put it in Gwgan Draw's hand, for the noble feats which he hath atchieved: the offspring of Gronwy, who valiantly fought in the midſt of dangers; a race of heroes for worthy acts renowned: and men, who, in every hardſhip they undergo, deſerve a reward; who are in the battle foremoſt: the guardians of Sabrina. Their friends exult, when they hear their voice. The feſtal ſhout will ceaſe when they are gone.

Fill thou the yellow-tipped horn, badge of honour and mirth, full of frothing meath; and if thou art deſirous to have thy life prolonged to the year's end, ſtop not the reward due to his virtue, for it is unjuſt; and bring it to Griffith, with the crimſon lance. Bring wine in the tranſparent horn; for he is the guardian of *Arwyſtli, the defence of its borders; a dragon of Owain the generous, whoſe deſcent is from Cynvyn; a dragon he was from the beginning, that never was terrified in the battle; his brave actions ſhall follow him. The warriors went to purchaſe renown, fluſhed with liquor, and armed like Edwin; they paid for their mead, like † Belyn's men, in the days of yore. And as long as men exiſt, their valour ſhall be the common theme of Bards.

Fill thou the horn; for it is my inclination, that we may converſe in mirth and feſtivity with our brave general; put it in the hand of the worthy Ednyfed, with his ſpear broken to pieces, and his ſhield pierced through. Like the burſting of a hurricane upon the ſmooth ſea . . . . . in the conflict of battle, they would ſoon break in pieces the ſides of a golden-bordered ſhield: their lances were beſmeared with gore, after piercing the heads of their enemies; they were vigorous and active in the defence of delightful ‡Garthan. Heard ye

* Arwyſtli, the name of one of the cantreds of Powys.

† Belyn, a great man from Lleyn in Carnarvonſhire, mentioned in the Triades, and is ſaid there to have fought with Edwin, king of the Northumbrians in Bryn Cenin in Rhos, in the County of Denbigh; probably he was one of Cadwallon's generals; it is well known, and confeſſed by Beda himſelf, that that prince was a terrible ſcourge to the Saxons.

‡ Garthan, the name of a fort or caſtle ſomewhere near the Severn.

ye in Maelor the noiſe of war, the horrid din of arms, their furious onſet, loud as in the battle of [b] Bangor, where fire flaſhed out of their ſpears? There two princes engaged, when the carouſing of Morach Vorvran [c] happened.

Fill thou the horn; for it is my delight, in the place where the defenders of our country drink mead, and give it to Selyf the fearleſs, the defence of [d] Gwygyr; woe to the wretch that offends him, eagle-hearted heroe: and to the ſon of Madoc, the famous and generous Tudur, like a wolf when he ſeizes his prey, is his aſſault in the onſet. Two heroes who were ſage in their counſels, but active in the field, the two ſons of Ynyr, who, on the day of battle, were ready for the attack, heedleſs of danger, famous for their exploits; their aſſault was like that of ſtrong lions, and they pierced their enemies like brave warriors, they were lords of the battle, and ruſhed foremoſt with their crimſon lances; the weight of their attack was not to be withſtood; their ſhields were broke aſunder with much force, as the high-ſounding wind on the beach of the green ſea, and the encroaching of the furious waves on the coaſt of [e] Talgarth.

Fill, cup-bearer, as thou regardeſt thy life; fill the horn, badge of honour at feaſts, the [f] hirlas drinking-horn, which is a token of diſtiction, whoſe tip is adorned with ſilver, and its cover of the ſame metal; and bring it to Tudur, the eagle of battles, filled with the beſt wine; and if thou doſt not bring us the beſt of all, thy head ſhall fly off: Give it in the hand of Moreiddig, encourager of ſongs, whoſe praiſe in battle is celebrated; they were brethren of a diſtant clime, of an undaunted heart, and their valour was obſervable in their countenance. Can I forget their ſervices? . . . . Impetuous warriors, wolves of the battle, their lances are beſmeared with gore; they were the heroes of the chief of [g] Mochnant, in the region of Powys. Their honour was ſoon purchaſed by them both; they ſeized every occaſion to defend their country, in the time of need, with their bloody arms, and they kept their

[b] This was the famous battle of Bangor-is-y-coed in Flintſhire, after the murder of the monks, at the inſtigation of Auſtin, the firſt converter of the Saxons to Chriſtianity. This is the account Humphrey Lloyd gives of that affair: "Ille vero [Auguſtinus S.] ob hanc contumeliam, & quod archiepiſcopo Cantuariæ a ſe conſtituto, & quod cum Romana eccleſia in quibuſdam non convenirent, Anglorum odium ita in eos concivit, ut paulo poſt (ut dixi) ab Ethelfredo, Ethelberti, Cantiæ regis, ob Auguſtino incitati, opera & auxiliis, monachi pacem petentes, crudeliter occiſi; & poſtea Britanni duce Brochwelo Powiſiæ Rege, victi ſunt, donec tandem Bletruſii Cornaviæ ducis, Cadvanni Northwalliæ, Mereduci Suthwalliæ regum copiis adjuti, & Dunoti abbatis viri doctiſſimi concione animati, quique juſſit (ut noſtri annales referunt) ut unuſquiſque terram oſcularetur, in memoriam communionis corporis Dominici, aquamque ex Deva fluvio manu hauſtam biberet, in memoriam ſacratiſſimi ſanguinis Chriſti pro eis effuſi, & ita communicati, memorabili prœlio Saxones, occiſis (ut Huntingtonenſis refert) ex eis MLXVI. Cadvanumque in civitate Legionis regem creavere." Britan. Deſcript. Commentariolum, p. 90, & 91, Moſes William's Edition. This battle is called in our annals ſometimes Gwatih Caerlleon, that is, the battle of Cheſter, and is ſaid to have been fought, A. D. 633.

[c] We have no account at preſent, that I know of, who this Morach Vorvran was, nor the occaſion of his joy and feſtivity, alluded to in this poem; probably it was upon the defeat of the Saxons as Bangor y Gwygyr.

[d] The name of a place, but where ſituated, I know not.

[e] Talgarth, the name of many places in Wales; but this muſt be ſomewhere near the ſea.

[f] Hirlas, the epithet of the horn, from hir, long, and glas, blue, or azure.

[g] Mochnannwys, in the original, he calls himſelf prince of the Mochnannwys, or inhabitants of Mochnant.

their borders from hoſtile invaſion. Their lot is praiſe; it is like a mournful elegy to me to loſe them both! O Chriſt! how penſive am I for the loſs of Moreiddig, which is irreparable.

Pour thou out the horn, though they deſire it not, the drinking horn, hirlas, with chearfulneſs, and deliver it into the hand of Morgant, one who deſerves to be celebrated with diſtinguiſhed praiſe. It was like poiſon to me, to be deprived of him, and that he was pierced - - - - by the keen ſword.

Pour, cup-bearer, from a ſilver veſſel, an honourable gift, badge of diſtinction. On the large plains of [h] Gweſtun I have ſeen a miracle; to ſtop the impetuoſity of Gronwy, was more than a taſk for an hundred men. The warriors pointed their lances, courted the battle, and were profuſe of life; they met their enemies in the conflict, and their cheftain was conſumed by fire near the ſurges of the ſea.[i] They reſcued a noble priſoner, Meurig the ſon of Griffith, of renowned valour; they were all of them covered with blood when they returned, and the high hills and the dales enjoyed the ſun equally.[k]

Pour the horn to the warriors, Owain's noble heroes, who were equally active and brave. They aſſembled in that renowned place, where the ſhining ſteel glittered. Madoc and Meilir were men accuſtomed to violence, and maintained each other in the injuries they did to their enemies; they were the ſhields of our army, and the teachers of warlike attack. Hear ye, by drinking mead, how the lord of Cattraeth went with his warriors in defence of his juſt cauſe, the guards of [l] Mynyddawc about their diſtinguiſhed chief. They have been celebrated for their bravery, and their ſpeedy march. But nobody has ever performed ſo noble an exploit as my warriors, in the tough land of Maelor, in reſcuing the captive.

Pour out, cup bearer, ſweet and well-ſtrained mead, (the thruſt of the ſpear is red in the time of need) from the horns of wild oxen, covered with gold, for the honour, and the reward of the ſouls of thoſe departed heroes. Of the numerous cares that ſurround princes, no one is conſcious here but God and myſelf. The man who neither gives nor takes quarter, and cannot be forced by his enemies to abide to his word, Daniel the valiant and beautifully: O cup-bearer, great is the taſk to entreat him; his men will not ceaſe dealing death around them, till he is mollified. Cup-bearer, our ſhares of mead are to be given us equally before the bright ſhining tapers. Cup-bearer, hadſt thou ſeen the action in the land of [m] Llidwm, the men whom I honour have but what is their juſt reward. Cup-bearer, hadſt thou ſeen the armed chiefs, encompaſſing Owain, who were his ſhield againſt the vic-

h Gweſtun, the name of a place ſomewhere in Powys.

i By this circumſtance, it ſeems, they reſcued the priſoner from ſome maritime town.

k Sun equally, that is, at noon day, which added much to the merit of the action.

l The guards of Mynyddaw Eiddin, or of Edinborough, in the battle of Cattraeth, which is celebrated by Aneurin Gwawdrydd, in his heroic poem entitled the Gododin. Mynyddawc was a prince of the North, he is mentioned in the Triades of Britain; and his guards, who were famous for their loyalty and bravery, were reckoned among the three noble guards of the kingdom of Britain; the other two being the guards, or, as the word Goſgordd may be tranſlated, the clans of Melyn the ſon of Cynvelyn, and the guards of Drywon the ſon of Nudd, in the battle of Rhodwyd Arderydd.

m Llidwm, the name of a place ſomewhere in Maelor.

lence of his foes, when Cawres was invaded with great fury. Cupbearer, ſlight not my commands: may we all be admitted into paradiſe by the king of kings; and long may the liberty and happineſs of my heroes continue, where the truth is to be diſcerned diſtinctly.

On the Laws *of* England.

Precedency at funerals.

BAttery by the plaintiff, being a doctor in divinity, and his wife againſt the defendant and his wife, of a battery committed by the defendant's wife upon the plaintiff's wife. The defendant pleads, that her huſband is a juſtice of peace, and an eſquire, in the town of Plymouth, where the battery was done, and that the defendant's wife ought to have precedence of the plaintiff's wife; and that at a certain funeral at Plymouth, the plaintiff's wife went before the defendant's wife, whereupon ſhe did gently lay her hands on the plaintiff's wife to pull her back into her place; to this the defendant demurs, and now Saunders argued that an eſquire's wife and a juſtice of peace's wife ought to have precedence of a doctor of divinity's wife, for though a doctor of divinity took place of an eſquire, (and as Wild ſaid, they contend with ſerjeants at law for precedency) yet Saunders ſaid, this was in reſpect of his degree in the univerſity which is perſonal to himſelf, and not communicable to his wife, no more than to a biſhop's wife, who is no lady, nor takes place as ſuch, though the biſhop is a lord of parliament, and as ſuch takes precedence. Rainſford and [a] Wild only, in court, ſaid that they would not countenance ſuch a juſtification, and beſides they were not judges of precedency: but the court of honor, and without determining the right of precedence, or paying the leaſt regard to it, they gave judgment for the plaintiff, that the defendant had by his plea confeſſed the battery. *Lev.* Rep. 133, 134. *Freem.* Rep. 393. pl. 508. 3 *Keb.* Rep. 462. pl. 33.

Wife againſt Wife.

Of proceedings againſt peers and members of parliament.

In order to proceed againſt the lands and goods of a peer or member of parliament (for you cannot proceed againſt their bodies at all in civil caſes, while they remain [b] peers or members of parliament, nor againſt their lands and goods during privilege of parliament.) You muſt draw a precipe, which you take to the curſitor of the county, who will thereupon make out an original, which you carry to the ſheriff of that county to which the writ is directed, who will ſummons the defendant to appear at the return of the writ.

You ſearch with Mr. Tully, at his office N°. 12, Holborn Court, Gray's Inn, whether the defendant has caſt an eſſoin, which he may do of courſe any time before the return of the original writ, but not afterwards; if the defendant has not caſt an eſſoin within time, you may then, at the ſaid Mr. Tully's office, enter a *ne recipiatur*, and thereby gain a term; if the defendant caſt his eſſoin in time, then he has till the firſt eſſoin, not the firſt day of the ſubſequent term to that in which the writ is returnable

[a] He obſerved, that if this ſhould be held a good plea, at every funeral there would be nothing but ſcuffling for places. *Freem.* Rep. p. 393. pl. 508.

[b] The duke of Bedford, 17 Edw. 4. was degraded on account of his poverty. Col. Preced. of Bar. 283, 284. Show. Parl. Caſ. 4. 12 Rep. 106, 107. 12 Mod. 56.

turnable, to appear; if he does not then appear you muſt adjourn the eſſoin to a further day, and then ſue out a diſtringas for want of an appearance, for which you muſt make out a precipe, which you carry to the filacer of the proper county, or you make it out yourſelf and get him to ſign it and then ſeal it, and carry it to the ſheriff's office; if the defendant does not appear on the return of the diſtringas, you muſt get the ſheriff to give you a return of the writ, whereupon you ſue an *alias*, and then a *pluries diſtringas*, when the attorney may move at the ſide bar in Weſtminſter to inlarge the iſſues, which the judges will order to be encreaſed to the amount of the debt.

N. B. There is no occaſion for notice of this motion, or any affidavit of facts or proceedings.

BURN's POOR LAWS.

To the EDITOR *of the* GENERAL MAGAZINE.

SIR,

HAving a very great opinion of the abilities of the Rev. Dr. Burn, I purchaſed his hiſtory of the poor laws; in the peruſal of which I was much ſurpriſed to find expreſſions and epithets by no means becoming a writer to the public, eſpecially to the legiſlative part of it: To ſay, "That an act of parliament is neither *grammar* nor *common ſenſe*, and that it is a *diſgrace* to the ſtatute book; that if an action were brought againſt a juſtice for convicting a perſon upon it, it might be difficult to ſupport his juriſdiction, unleſs it were allowed, in caſes *penal*, to *conſtrue* an act by *equity* into a ſenſe which *legally* it will not bear, and to gueſs at its meaning, in order to deprive the ſubject of his goods or his liberty:" ſuch expreſſions as theſe ſeem to me rather too preſumptuous *to be ſubmitted to the wiſdom of the legiſlature:* Soon after, "That it ſeems high time to repeal the very ſevere laws againſt deſtroying of hawks, for that the additional penalty of one penny for each egg deſtroyed, in theſe our days, conſidering the uſual expence of a law ſuit, ſeemeth ſomewhat *ridiculous*."

An information was moved for about laſt Hilary Term againſt a country juſtice of peace, for levying larger penalties on an hawker and pedlar than inflicted by law, and the information was granted, notwithſtanding (or indeed more properly becauſe) the defendant had followed Mr. Juſtice Burn's directions therein, our author was informed of this miſtake, and in the work now before us excuſes himſelf, by inſiſting that *his conſtruction ſeemed to be intended, but that it was ungrammatically expreſſed.* See Hiſt. Poor Laws, p. 274, to 277.

Caſe for the lawyers, anſwered.

CASE.

In one of the articles of Magna Charta it is ſaid, "No freeman or freeholder *(Liber homo)* ſhall be emerced, impriſoned, or diſſeized of his freehold, or deprived of his liberty or of his privileges, or be baniſhed or be injured in any of theſe, by any means whatever; nor will we proceed againſt him or commit him, nor ſhall he be adjudged or condemned, but by the judgment of his peers and the law of the land."

At the confirmation of Magna Charta, by Edward I. it was declared, "That any ſtatute or act which ſhould any way repeal or infringe any article, or thing, contained in the ſaid great charter, ſhall be forever null and void, any thing to the contrary in ſuch act or ſtatute notwithſtanding."

By an act paſſed in the third year of his preſent majeſty, "*All perſons* being makers of cyder and perry, offending againſt the ſaid act, ſhall be ſubject to the penalties therein

contained; and likewiſe to all ſuch other pains and penalties, as by any law, or laws of exciſe, are in force, &c."

Quere. Are the laws of exciſe the laws of the land? And how far will A. B. and C. (being *Freeholders* in the county of Warwick, and makers of cyder and perry) be, by the ſaid act of parliament, ſubject to exciſe laws, or to any proceſs other than according to the law of the land? Is the above article of Magna Charta ſtill in force, and are A. B. and C. entitled to the benefit of *legal proceſs*, and *judgment of their peers*, notwithſtending the ſaid act of parliament?

ANSWER.

The laws of exciſe are the laws of the land; and A. B. and C. (*tho'* freeholders in the county of Warwick, *if* makers of cyder and perry) are by the ſaid act of parliament, ſubject to the exciſe laws, but to no proceſs other than according to the law of land; the above article of Magna Charta is ſtill in force, and A. B. and C. are intitled to legal proceſs, and to the judgment of their peers, in caſes wherein the ſaid act of parliament, or any ſubſequent act, has not taken it away.

Reaſons for the above opinion.

It is one of the chief excellencies of this conſtitution, that neither our lives, our liberties, or our properties, can be in the leaſt affected without our own conſent. Upon this principle is founded the legiſlature of this kingdom, which conſiſts of the king, lords, and commons, the latter repreſent the people of England, and as no law can paſs without their concurrence, every law which they agree to is very juſtly ſaid to have every individual's aſſent; if, therefore, the laws of exciſe have the parliamentary ſanction, they are as much the laws of the land as Magna Charta. It is obſervable, that the offenders againſt thoſe laws prefer their ſummary proceedings to a trial by jury, by reaſon of its expence and tediouſneſs, and of the known integrity and abilities of the gentlemen appointed to carry the exciſe laws into execution.

It muſt indeed be confeſſed, that ſome laws ſeem derogatory to the great charter of liberties, particularly informations and the ſummary proceedings of juſtices of the peace, if being deprived of a trial by a jury make them ſo. However, if we think proper to diſpenſe with a law, we certainly may, for *Quilibet poteſt renunciare Juri pro ſe introducto.*

Holt.

The opinion of the honourable Charles York, *touching lord* Clive's *jaghire, taken by the court of directors of the Eaſt India Company.*

There are two queſtions to be conſidered in this caſe. The firſt (in order) is the juriſdiction of the court of Chancery. The ſecond is, upon the merits of the demand. I will conſider the merits of the demand in the firſt place; becauſe if lord Clive is intitled in juſtice to the rent iſſuing out of the lands granted by Meir Jaffier, to the company, they will (as they ought) turn chancellors againſt themſelves, and not think it for their honour that the relief prayed ſhould be denied, merely upon a defect of a juriſdiction in the court of Chancery. *Lord* Clive's *jaghire.*

And I muſt own, after conſidering this queſtion, upon the pleadings and papers laid before me, I have no doubt upon the right of lord Clive to the rent or jaghire demanded. The grants of the lands to the company was made by Meir Jaffier in the year 1757 (out of which the rent was reſerved to him as Nabob of the province); the

rent

rent ſo reſerved was aſſigned by the Nabob to lord Clive in 1759. Both grants flowed from the ſame authority; and therefore in a queſtion between the Eaſt India Company, as grantee of the lands from Meir Jaffier, and lord Clive, as a grantee of the rent, it appears to me immaterial to enter into ſuch objections as might be made either by the Mogul or the ſucceſſors of the Nabob Meir Jaffier to the form or ſubſtance of thoſe grants, they both claim and derive under the ſame grantor: and the Eaſt India company cannot raiſe an objection againſt the grant to lord Clive, founded on the want of right and power in the Nabob, which will not impeach their own, if lord Clive (as a ſervant of the company) has been bound by covenants or bye-laws not to accept any reward from the Indian princes, or inferior ſovereigns in the Mogul empire, or from the Mogul, without licence of the company or court of directors (even for ſervices performed to thoſe princes, not immediately relative to the commerce of the company) I ſhould have thought that he would have been bound, by ſuch convenants or bye-laws, to renounce and relinquiſh ſuch rewards or advantanges; and he might have been liable, in ſuch caſe, to damages at law, or to an account in a court of equity. But I am of opinion, that the queſtion of right in this inſtance, is to be conſidered not upon the ſtrict abſolute merits (according to the laws and conſtitution of the Mogul empire) but relatively, as between the Eaſt India company, the grantee of the lands from Meer Jaffier, and lord Clive the grantee of the ſame Nabob, of a rent iſſuing and reſerved out of thoſe lands, when granted to the company. And I am alſo of opinion, that this queſtion ought to be determined between his lordſhip and the company, upon the ſame principles as the like queſtion would be determined ariſing between the owner of the lands in England ſubject to a rent, and the grantee or aſſignee of that rent in a caſe where both parties derived from the ſame original grantor. As to the queſtion of juriſdiction, I have already ſaid, that I am ſatisfied, if the directors and proprietors ſee the merits of lord Clive's demand in the ſame light in which it ſtrikes me, they will turn chancellors againſt themſelves. It is for the honour of that great company to act upon ſuch principles, not only with foreign merchants, trading companies, and foreign ſtates and ſovereigns, but with their own ſervants. I muſt ſay, however, that I have no doubt upon the point of juriſdiction in chancery.

That court, as a court of equity, acts by its decrees, not in *rem*, but in *perſonem*; and therefore if the defendant (the Eaſt India company) againſt whom an account of the profits of the land is prayed, ameſnable to the proceſs and juſtice of Chancery (as moſt certainly the company is) the only queſtion to be conſidered, will be, whether the relief prayed by the plaintiff is ſuch as can be given by the court againſt the defendants. Now the relief prayed is merely by way of account of rents and payment of the *jaghire*, in a caſe where it is not ſuggeſted or pretended, that the ſervants and receivers of the company in India are or yet have been interrupted in the receipt and perception of theſe rents; and therefore the bill is brought by lord Clive in Chancery, in the ſame manner, and upon the ſame grounds, and may be entertained by the court upon the ſame principles, as in every caſe of a demand by the grantee of a rent or annuity iſſuing out of lands againſt the owner of ſuch lands for the arrears and growing payments; which juriſdiction

might

might be exercised between parties resident in England by way of account whether the lands lay in Ireland or the Plantations, or in any other country. The reason is, because the defendant in all these cases, so far as the rent or annuity extends, is to be regarded as a trustee, bailiff, or receiver for the plaintiff. And I am of opinion that this jurisdiction is exercised, merely between the parties resident and amesnable to the process of the court; that is, it acts in *personam*, not in *rem*; nor is to be compared with cases of title, where the court decrees possession, or title deeds to be delivered up, or perpetual injunctions to quiet possession; or where it directs issues of fact to be tried by juries at common law, upon boundaries, or upon the validity of deeds or wills, in respect of the execution of them, or their validity as instruments. In cases of this latter kind, the court, both by its interlocutory and final decrees, in some sort, gives relief upon the merits of the strict title to the thing in question. But the relief prayed by lord Clive's bill does not involve any such question or consideration

Upon the whole, I am of opinion with the plaintiff, both upon the merits and the jurisdiction.

April 28, 1764. C. YORKE.

The natural and acquired endowments necessary for a lawyer, taken from a pamphlet lately published. By a Barister.

Qualifications for a Lawyer.

1. A Quick conception and an easy delivery.

2. A liberal education, with a good memory.

3. A sound judgment, and patience to distinguish the difference of cases.

4. Much study and close application, to obtain a thorough knowledge of the learned science or profession in all its various and complicated branches.

5. Carefully reading of the best authors, and the latest reports of good authority, and endeavouring to distinguish the grounds or reasons for the various determinations.

6. Frequent attendances on the several courts of law and equity, and taking accurate notes of the cases, arguments, and solemn judgments thereon, and placing the same under proper heads or titles.

7. A competent knowledge of special pleading, and of the civil and crown laws, with a perfect understanding of the law of evidences, tenures, deeds, and operations thereof.

8. A general knowledge of history, and the policies of government, men, manners, and customs.

9. Great command of temper, and steadiness of mind and countenance; much courage, tempered with good manners, and some cunning.

10. A good constitution, great assiduity and temperance.

**Trial of major general Monckton at the Judge Advocate's Office in the Horse-guards, on Saturday the 14th, and continued by adjournment to Wednesday the 18th of April, 1764, for a charge preferred by Colin Campbell, Esq;*

THE charge was for many wrongs and deliberate acts of oppression towards the said Colin Campbell, when under his command

* For the better understanding this trial it is necessary the reader should be previously informed, that Colin Campbell, Esq; was major commandant of the 100th regiment of foot

mand in the iſland of Martinique, in the year 1762, particularly by ſeveral marks of affront and indignity both to the perſon of the ſaid Colin Campbell, and to the corps then under his command; and alſo whilſt a trial of the ſaid Colin Campbell was depending before a general court martial, by diſcouraging his friends, intimidating his witneſſes, and depriving him of the lawful means of defence, as well as by ſuppreſſing the proceedings of the ſaid general court martial from the earl of Albemarle, lieutenant general of his majeſty's forces, (who is alledged, by the ſaid Colin Campbell, to have had at that time cognizance of the ſentences of court martials held in the ſaid iſland of Martinique) under a pretence of the ſaid proceedings being tranſmitted to Great Britain, when in truth they were ſtill in his own cuſtody: and furthermore, by a cruel confinement of the ſaid Colin Campbell, who was then ill, in a noiſome and unhealthy priſon, even though it was at that time known to the ſaid major general Monckton, that the ſentence againſt the ſaid Colin Campbell was not capital.

With regard to the affronts offered to Mr. Campbell and his corps, it appeared that their arms had been exchanged (with the light infantry who were choſen men) for ſome which were but very indifferent, that part of them were employed in drawing of cannon, carrying ſhot, faſcines, &c. and that the ſick were refuſed admittance into the hoſpital. But on the contrary, it appeared that the corps were the worſt that ever was ſeen, entirely unexperienced, &c. therefore as they were in a great meaſure unfit for ſervice (being chiefly old men and boys), general Monckton thought it moſt prudent to employ them in that manner, inſtead of better troops: and that the hoſpital was ſo full of ſick there was not room for them; but a ſhed was provided for ſome, and the reſt were attended in their tents.

With regard to the diſcouraging Mr. Campbell's friends, intimidating his witneſſes, and depriving him of the lawful means of defence; no ſuch things appeared in any part whatſoever. This was a material accuſation, and the court took particular pains in examining it thoroughly, and it appeared in every reſpect to be entirely without the leaſt foundation.

With regard to the ſuppreſſing the proceedings from lord Albemarle under a pretence of their being ſent to England, when in fact they were in his own (general Monkton's) hands: it appeared that as ſoon as lord Albemare arrived at Martinico, general Monckton waited on his lordſhip, with the returns of the army under his command, and a report of the forwardneſs of the embarkation of the troops deſtined for the ſervice under his lordſhip's command; and at the ſame time holding out a paper, ſaid, " my lord, theſe are the proceedings

at Martinique, when general Monckton conquered the iſland. He had been tried by a court martial held at Martinique in April, 1762, for the murder of captain John M'Kaarg, of the ſame corps, for which the court (there not being a ſufficient majority of voices to puniſh with *Death* as required by the articles of war) ſentenced him to be caſhiered, and pronounced him unfit to ſerve in any military employment whatſoever. But the court martial having been irregular in ſome points, his majeſty did not think proper to confirm their proceedings; but being ſatisfied with their opinion from the evidence in general, he immediately diſmiſſed Colin Campbell the ſervice, as unworthy of being employed in any military capacity whatever. When Mr. Campbell came to England he preſented a memorial to the ſecretary of war, moſt bitterly inveighing againſt general Monckton, and promiſing to prove abundance of crimes. Upon this, the court martial was held at the Judge Advocate's Office, as above.

ceedings of a general court martial upon major Campbell, accuſed of the murder of a captain in the ſame regiment; will your lordſhip pleaſe to give me your commands upon it." His anſwer was, that he had determined not to interfere in any ſhape with his, major general Monckton's commands; and that as his ſtay in the iſland was to be very ſhort, he did not chuſe to take a command which he found in the hands of general Monckton, who had conquered the iſland ſo much to his own honour, and the ſatisfaction of the army. To which general Monckton replied, "He muſt then ſend the court martial to England, not having the power to confirm general courts martial upon commiſſioned officers." Mr. Campbell having wrote to his lordſhip on the ſubject of the court martial, which had been held for his trial, his lordſhip returned him the following anſwer.

Namur in Fort Royal Harbour, May 1ſt, 1762.

SIR,

I received your letter incloſing the minutes of your defence. As your court martial is gone to England to be laid before his majeſty, you muſt neceſſarily remain here, till the king's pleaſure is known. In the mean time I am perſuaded you will meet with all the indulgence from general Monckton, which a perſon in your unfortunate ſituation can reaſonably expect. I am,

Sir, your moſt obedient ſervant,

Albemarle."

To Major Colin Campbell.

And it farther appeared, that general Monckton directly ſent the proceedings of the court martial along with his diſpatches for the miniſtry, to *Antigua*, in order that they might go with the firſt man of war to England, there being no regular conveyance from Martinique.

With regard to the cruel confinement, &c. as mentioned in the charge, it appeared, that when the court martial had not adjudged his crime capital, he deſired leave to return to England; which the general did not think himſelf authorized to grant: but agreeable to the general's intention he was removed from the place of his former confinement to the fort of Fort Royal, eſteemed one of the moſt healthy parts of the iſland, and was lodged in the ſame apartments which had been formerly occupied by monſ. Nadeau, the late French governor of Guadeloupe. Some time after general Monckton left the iſland, col. Rufane (who ſucceeded to the government) removed him from the fort to the town of Fort Royal, at his own requeſt, and lodged him according to his liking; whereupon he almoſt immediately made his eſcape.

After hearing all theſe matters in the moſt full and clear manner, gen. Monckton concluded his defence in theſe words:

"After firſt declaring moſt ſolemnly to this court, that I cannot charge myſelf with ever having entertained a ſingle thought in the leaſt tending to the injury of the proſecutor, which in his charge has been ſo virulently expreſſed; — I ſhall only take the liberty of adding a very few reflections upon this extraordinary trial.

"The accuſation againſt me was ſo wild and violent, as not to bear in it the ſmalleſt probability of truth. Lord Albemarle, or any officer of reputation, might have been called upon, and the aſking a very few queſtions, would have immediately proved how falſe and unjuſtifiable the proſecutor's charge would appear; inſtead of this, the bitter memorial, and charge, which has been read to you, was preſented to his majeſty;

majeſty; and I had the mortification of ſtanding in the preſence of my ſovereign, accuſed of the blackeſt crimes.

"As I knew no guilt, I could not want the ſecretary at war to ſcreen me from juſtice; but I thought the proſecutor's circumſtances, and my character, would both join in recommending ſome ſort of inquiry, before ſo ſtrange an accuſation ſhould reach his majeſty's ear.

"My concern in this caſe is not confined to myſelf; I feel for the ſervice; I feel for the dignity of my rank: I leave it to you, gentlemen, to reflect on the conſequences, if malice and deſpair are ſo eaſily allowed to ſtrike at innocence; and a proſecutor, under ſuch circumſtances, as Mr. Campbell, ſhall be able to bring a commander in chief, as a criminal, to your bar."

The court then came to the following opinion.

"The court is of opinion, that the charge and complaint of Colin Campbell, Eſq; againſt major general Robert Monckton is altogether unſupported by evidence, and in ſome points expreſsly contradicted by the complainant's own witneſſes; and doth therefore moſt honourably acquit the ſaid major general Monckton of the ſame and every part thereof. And the court is farther of opinion, that the ſaid charge and complaint is groundleſs, malicious, and ſcandalous in the higheſt degree, and tending not only to injure the ſaid major general Monckton in his character, but to hurt the ſervice in general, as it muſt greatly affect every officer, who may have the honour of commanding a body of his majeſty's troops, when he reflects that his character and reputation are liable to be thus publickly attacked by a perſon, who has been diſmiſſed his majeſty's ſervice with ignominy.

"It is likewiſe the opinion of this court, that the complainant Colin Campbell, Eſq; has, by many falſities impoſed upon his majeſty's ſecretary at war, in order to obtain a court martial.

JOHN MORDAUNT.

A true Copy,
Cha. Gould,
Judge Advocate's Office,
15th *May*, 1764.

To the AUTHOR *of the* GENERAL MAGAZINE.

SIR,

A Phyſician who for many years has experienced a pleaſant, ſafe and never but effectual medicine, if applied in time, for thoſe convulſive, ſtrangulating coughs in children, vulgarly called the Chin or Whooping Cough, which abundance of them are troubled with, and which but very few practitioners or dealers in medicine know how to remedy, and by which many children are ſuddenly carried off, eſpecially the very young and weakly of them, who have not ſtrength to grapple with ſuch violent fits of coughing; was willing, in compaſſion to thoſe little tender creatures, to communicate it for their good, and therefore deſires you would give it room in your Magazine.

The RECEIPT *is this,*

"Take dried Coltsfoot Leaves a good handful, cut them ſmall, and boil them in a pint of ſpring water, till half a pint is boiled away; then take it off the fire, and when it is almoſt cold, ſtrain it through a cloth, ſqueezing the herb as dry as you can; and then throw it away, and diſſolve in the liquor an ounce of brown ſugarcandy, finely powdered, and then give the child, (if it be about three or four years old, and ſo in proportion) one ſpoonful of it, cold

cold or warm as the ſeaſon proves, three or four times a day (or oftner, if the fits of coughing come frequently) till well; which will be in two or three days, but it will preſently almoſt abate the fits of coughing."

This herb ſeems to be a ſpecifick for thoſe ſorts of coughs, and indeed for all others, in old as well as young; for it has wonderfully eaſed them, when nothing elſe would do it, and greatly helps in ſhortneſs of breath; and in the aſthma and phthiſick he has not known any thing exceed it; likewiſe in waſtings or conſumptions of the lungs, it has been found of excellent uſe, by its ſmooth, ſoftning, healing qualities, even where there has been ſpitting of blood, and rawneſs and ſoreneſs of the paſſages, with hoarſeneſs, &c. in blunting the acrimonious humours, which in ſuch caſes are almoſt continually dripping upon them. It is to be queſtioned, whether for thoſe purſpoſes there is to be had, in the whole Materia Medica, a medicine ſo innocent, ſo ſafe, and yet ſo pleaſant and effectual, or that can afford relief ſo ſoon as this will. Grown People may make it ſtronger than for children. If the phyſician that communicates this, receives the thanks of thoſe it helps, (which is all he deſires) he may this way, by the means of your magazine, aſſiſt the public in ſome other particulars.

To Mr. OWEN.

SIR,

THE following preſcription of the celebrated meſſieurs Boerhaave and Oſterdyke, for the cure of the Gout, has been tried with ſo much ſucceſs, that, for the benefit of the public, I deſire it may be inſerted in your magazine,

Yours, &c.

Profeſſors BOERHAAVE *and* OSTERDYKE*'s Regimen preſcribed for the Gout.*

THEY are of opinion that the Gout is not to be cured by any other means but a Milk-diet, which will, in twelve months time, alter the whole maſs of blood; and in order thereto, the following directions muſt be ſtrictly obſerved and followed:

I. You muſt not taſte any liquor, only a mixture of one third milk and two thirds water, your milk as new as you can get it, and to drink it as often as you have occaſion for it, without adding any other to it. A little tea and coffee is likewiſe permitted, with milk.

II. In a morning as ſoon as awake, and the ſtomach has made a digeſtion, you muſt drink eight ounces of ſpring water, and faſt two hours after; then eat milk and bread, Milk-pottage, or tea with milk, with a little bread and freſh butter.

III. At dinner you muſt not eat any thing but what is made of barley, oats, rice, or millet ſeed, carrots, potatoes, turnips, ſpinage, beans, peaſe, &c. You may likewiſe eat fruit, when full ripe, baked pears or apples, apple-dumplings, but above all, milk and biſket is very good, but nothing ſalt or ſour, not even a Seville orange.

IV. At ſupper you muſt eat nothing but milk and bread.

V. It is neceſſary to go to bed betimes, even before nine o'clock, to accuſtom yourſelf to ſleep much, and uſe yourſelf to it.

VI. Every morning before you riſe, to have your feet, legs, arms, and hands, well rubbed with pieces of woollen cloth, for half an hour, and the ſame going to bed. This article muſt be ſtrictly obſerved, for by

by this means the humours, knobs, and bunches will be diſſipated, and prevent their fixing in the joints, by which they become uſeleſs.

VII. You muſt accuſtom yourſelf to exerciſe, as riding on horſe-back, which is beſt, or in a coach, chaiſe, &c. the more the better, but take care of the cold weather, winds, and rain.

Laſtly, In caſe a fit of the gout ſhould return, and be violent, which they are of opinion will not, then a little doſe of opium, or laudanum, may be taken to compoſe you; but no oftner than neceſſity requires. They are of opinion, that your father or mother having the gout, is of no conſequence, if you will reſolve to follow the foregoing directions ſtrictly.

Method for the ſpeedy recovery of the uſe of the foot or hand that has been violently ſprained.

A Sprain (which may more properly be called a ſtrain) whether of the foot or hand, is an accident that frequently happens, and if great, occaſions a painful lameneſs of the part for a while, and hinders the doing of their uſual buſineſs; and therefore the propoſing a method which may haſten a recovery of the part ſtrained to its natural ſtate, doubtleſs will be acceptable to the public, and of ſervice to thoſe who may want it.

It may lead us to a right management of the part ſtrained, if we conſider the effects of a ſtrain when it is very great, viz.

Firſt, Such an extenſion of the tendons and veſſels of the muſcles ſtrained that they cannot contract themſelves to their natural lengths.

Second, That the great elongation of the veſſels (which deprives them of their contractile power) leſſens the diameter of their cavities, obſtructs the free courſe of the fluids through them, makes them ſwell and become painful and incapable of their uſual ſervices, or of being moved by the acts of the will, as before the accident happened.

Theſe effects of violent ſtrains may lead us to conclude, that the beſt remedies are thoſe applications which may beſt attenuate their obſtructed fluids, recover an eaſy circulation of them, and ſufficiently contract the elongated veſſels.

For theſe purpoſes I adviſe vinegar, the rectified ſpirits of wine, ſuch as are burnt in lamps, friction, and motion, in the following manner, viz.

Suppoſe the ancle ſprained.

Firſt, Let it be fomented with vinegar, a little warm, for four or five minutes at a time once every four hours; this will render the circulation of the fluids in the parts affected more eaſy, and either prevent its ſwelling or promote its ſubſiding.

Second, Let the perſon ſtand three or four minutes at a time on both his feet in their natural poſture, and ſometimes move the ſtrained foot; and ſometimes, when ſitting with his foot on a low ſtool, let him move it this way and that as he can bear it; this will contribute much to contract the overſtretched veſſels, and to recover a due circulation of their fluids through them.

Third, Let a gentle dry friction with a warm hand be ſometimes uſed to the part affected, which will conduce much to the ſame ends.

Two hours after every application of the vinegar, let the parts affected be juſt wetted with rectified ſpirits of wine, and then gently rubbed.

By theſe means, perſons to whom I have adviſed them have recovered from the effects of very violent ſprains in a few days, when others have been weeks in recovering, where different ways of management, ſuch as continual reſting of the ſtrained foot, and diſuſe of its motions, &c. had been recommended.

Of Blood-letting.

A Diſpute has long ſubſiſted among the medical faculty concerning blood-letting; ſome aſſerting that blood-letting is always pernicious, except the quantity of blood in the patient ſuperabounds; others affirming that blood-letting may be expedient when the quantity of blood does not ſuperabound, and that the taking away ſome blood not only leſſens the quantity but alters the quality of that which remains. Thoſe who are againſt blood-letting, except when there is a plethora, argue thus: Diſeaſes in general have three cauſes, firſt, a deficiency of fluids; ſecondly, a ſuperabundance; or thirdly, morbid qualities without either ſuperabundance or deficiency. To take away blood when the quality is morbid and the quantity not too great, inſtead of removing the diſorder ariſing from the morbid quality, will introduce the cauſe of thoſe diſorders that ariſe from inanition, by rendering the quantity of blood too little, and therefore cannot change the ſtate of the blood but from bad to worſe; for the mere

diminution of the quantity of blood in the body can no more alter the condition of the blood that remains, than the pouring out a glaſs of wine from the bottle can alter the condition of the wine that remains; and the blood that is produced to ſupply the place of that taken away is not likely to be better, becauſe it will be produced after a new cauſe of diſeaſe has been complicated with that which produces the firſt. This ſeems to be very plauſible; but I have one queſtion to propoſe to thoſe who oppoſe blood-letting with a view to alter its qualities.

Will not repeated bleeding in ſmall quantities, long continued, ſo change the blood that it will loſe its florid colour, and iſſue almoſt white from the vein? Is this gradual change neceſſarily morbid in every ſtage, whatever was the quality of the blood when the courſe of bleeding was begun? if not, does it not follow that blood-letting produces a change in the blood which cannot be conſidered merely as an approach to ſome diſeaſe that is the effect of inanition? If ſome gentlemen of the faculty would candidly obviate the difficulty which ſuggeſted theſe queries, without cavilling at the terms or taking advantage of any inaccuracy or want of medicinal knowledge that may appear in the manner of putting them, he will much oblige a ſincere well-wiſher to the general health of mankind, and to whatever may tend to continue or reſtore it.

On MADE WINES.

THAT the fertility and produce of Great Britain equals any nation under heaven in every thing which conduces to the ſubſiſtence, health and riches of its inhabitants, will not at this time, after ſo many demonſtrations and proofs, be queſtioned. England is ſtiled by foreigners the ſtore-houſe and granary of Europe; and nothing but want of ſkill and induſtry can at preſent hinder us from making thoſe wholeſome liquors called Made Wines, among many other things, at leaſt as good, if not ſuperior to thoſe brought from abroad, to the great exhauſting of our treaſure, and the manifeſt detriment of our inland trade particularly; nay, I muſt beg leave to affirm, that the liquors produced of our natural growth, are not only as pleaſant in taſte, if rightly made and prepared, as any other, but far more agreeable to the conſtitution of Engliſhmen, by contributing to their natural health and vigour; and, if not taken to exceſs, they lengthen life, and free old age from thoſe calamities that adulterated foreign wines and other liquors, too often occaſion; which is evident from the innumerable pains and diſeaſes their ſediments entail, by corrupting the good, or creating bad humours in the body.

A Method of making Mead, that will be nearly as good as ſome foreign Wines.

To one hundred and twenty gallons of pure water, the ſofter the better, put fifteen gallons of clarified honey. When the honey is well mixed with the water, put half of it into a copper and boil it till it is reduced about a fourth part: then draw it off, and boil the remainder in the ſame manner. When this laſt is about a fourth part waſted, add to it that which was firſt boiled, and continue boiling it, and filling it up, till half evaporated.

In boiling, never take off the ſcum; but, on the contrary, have it well mixed with the liquor, whilſt boiling, by means of a jet.

When this is done, draw it off into under-backs by a cock at the bottom of the copper, where it is to remain till it is only as warm as new milk. At this time tun it up, and let it ferment in the veſſel, where it will form a thick head. As ſoon as it has done working, ſtop it down very cloſe, in order to keep the air from it as much as poſſible. Keep it in a cellar, or vault, that is very cool, and obſerve that the door is ſhut ſo cloſe as to keep out all the outward air; by which the liquor will be always in the ſame temperature, being not at all affected by change of weather: which will contribute, as much as any thing, to the goodneſs of the mead.

Another proportion of making mead is, to allow eighty pounds of purified honey to one hundred and twenty gallons of ſoft water, which is made, in all reſpects, like the firſt; and it proves very pleaſant, light drinking, but not ſo rich as the other.

A Method of making Honey Wine.

Throw *cold* water upon honey, in the proportion of a quart of water to a pound of honey: in the courſe of two or three weeks, and with a little ſtirring, the honey will diſſolve, and a fermentation will come on, without the help of yeſt, which impregnates the wine with a diſagreeable beery flavour: then put it up, and at a proper time ſtop it cloſe. This is the whole proceſs. At the end of one year, it carries ſo little

little the taſte of honey, as agreeably to deceive thoſe who have drank of it.

The trouble, expence, and waſte of boiling the liquor, are thus ſaved. But the query is, whether honey and water require boiling, as is commonly imagined, any more than raiſins, currants, and many other fruits, which are often made into wine.

To make and order Currant Wine.

Take four gallons of curious cooling ſpring, or conduit water, let it gently ſimmer over a moderate fire, ſcum it well, and ſtir into it eight pounds of the beſt virgin-honey; when that is thoroughly diſſolved, take off the water, and ſtir it well about, to raiſe the ſcum, which take clean off, and cool.

When it is thus prepared, preſs out the like quantity of juice of red currants moderately ripe, without any green ones among them, which being well ſtrained, mix it well with the water and honey, then put them up in a caſk, or large earthen veſſel, and let them ſtand upon the ferment twenty-four hours; then to every gallon add two pounds of loaf, or other fine ſugar, ſtir them well to raiſe the ſcum, and, when well ſettled, take it off, and add half an ounce of cream of tartar, with a little fine flour, and the whites of two or three eggs, which will refine it, and when it is well ſettled and clear, draw it off into a ſmall veſſel, or bottle it up, keeping it in a cool place.

Of white currants, a wine, after the ſame manner, may be made, that will equal in ſtrength and pleaſantneſs many ſorts of white wine; but as for the black, or Dutch currants, they are not approved of but in medicinal wines.

Another way of making Currant Wine.

After gathering your currants, which you muſt do when the weather is dry, and they are full ripe, ſtrip them carefully from the ſtalk, ſo as not to bruiſe them with your fingers: put them into a pan, and bruiſe them with a convenient wooden peſtle; then let it ſtand about twenty hours (according to the quantity) after which ſtrain it through a ſieve. Add three pounds of fine powder ſugar to every four quarts of the liquor, and then ſhaking or ſtirring it well, fill your veſſel, and put about a quart of good brandy to every ſix or ſeven gallons. As ſoon as it is fine, which will be in four or five weeks, you muſt bottle it off. If it ſhould not prove quite clear, draw it off into another veſſel, and let it ſtand about ten days, and then bottle it off.

Their Virtues.

They allay the burning eagerneſs of thirſt, are cooling in fevers, reſiſt putrefaction, ſtay vomiting, corroborate the heart, and fortify the ſtomach. Currant wine is drank with ſucceſs by thoſe that have the fits of the mother; it diverts epilepſy, and provoke the courſes in women.

Uſeful Hints and Obſervations for the improvement of Agriculture, &c.

An eaſy Remedy for Cattle that are blown or hoved by Lucern, &c.

WHEN a bullock is ſo much ſwoln that he cannot dung, and moving is painful to him, take two quarts of mild ale, put into it live coals and embers (of wood) till the beer is blood warm; ſcum off the coals that ſwim; and give him the beer and aſhes. and drive him about; that will make him break wind in a ſhort time, which will immediately relieve him.

Mr. Rocque, of Waltham Green, obſerves that the firſt cut of the burnet will cure horſes of the greaſe, and there is no danger of its blowing, or hoving cattle; but the Lucern will, unleſs it be cut the day before it is given to them.

A new method of drying hops.

Cover the bottom or floor, where the hops are to lie, with good tin plates, ſoldered and riveted together: over this tin floor lay a double hair-cloth ſtrained pretty tight; and on this lay the hops, which in this method dry gradually, and retain their fine colour and ſmell; qualities which add much to their value in a market.

When one ſide of the bed of hops is ſufficiently dried, ſlacken the fire in the furnace, that the great heat may go off before they are turned: this is neceſſary, as they would otherwiſe break and ſhatter in the operation.

Do not lay them above four inches thick on the cloth; but if hurried, lay them ſix or eight inches thick, with this caution however, that the thicker the layer or bed is, the more ſlow and gradual at firſt ſhould be the heat to dry them.

It is not eaſy to deſcribe when the bed will be fit for turning: it may, however, eaſily be known on inſpection; and ſome ſay, that when they are ſo light as to jump, when the bed is beat gently with a ſtick, they ſhould be turned: one thing, however, is to be obſerved, that after they are turned, a very few hours complete the drying; a third or a fourth part of the time they were on the kiln before turning will do.

The

The beſt method of fattening pigs.

Put two pigs of the ſame litter and weight in different ſties for fattening; give each the ſame quantity of peas, meal, or whatever food it be; make no difference but in the quantity of water given. Suppoſe, for inſtance, A's pig has a gallon a day, and B's but two quarts, or in proportion to a larger quantity, A's pig will be conſiderable the fatteſt and heavieſt, but B's will be the beſt and firmeſt meat. Great quantities of liquids extend the veſſels of both man and beaſt; and a due, but not over, proportion of water is a neceſſary conſideration for thoſe who would have good bacon or pork.

It is a vulgar ſaying, that hogs delight in dirt: they do ſo; but the hog that is kept clean, and feeds cleaneſt, is the wholeſomeſt and beſt meat.

Cragg as a manure in Suffolk.

There is in Suffolk a manure which the farmers call *cragg*, and which is the remains of marine ſhells of various kinds, and in which the greateſt part of the cliffs on the Britiſh coaſt abound. Wherever this cragg is to be found, it is a treaſure to the farmer, for with it he may warm and meliorate all his cold, wet, or clay land, ſo as to render it inferior to none.

It is but a few years ſince this ready prepared lime has been uſed in Suffolk; and the farmers, who had long leaſes on exhauſted lands, have, in conſequence of this diſcovery, become rich with the uſe of it; and wherever it can be found, it will be productive of the ſame ſucceſs.

To cure the tick, or ſheep lice.

Take two quarts of ſoft water, a quarter of an ounce of ſublimate, an ounce of cream of tartar, and a quarter of a pound of bay-ſalt: the cream of of tartar and ſalt muſt be pounded and ſifted; part the wool of the ſheep, and moiſten their ſkins here and there with this compound, which is infallible for the purpoſe, eſpecially if twice or thrice repeated.

It is a good practice to waſh the ſheep after ſhearing with ſtrong brine, or if near the ſea with ſea-water.

Obſervations on Timothy Graſs.

This plant is American and grows in the ſwampy grounds of Virginia, without cultivation, to a great height.

The ſeeds were carried from Virginia to North Carolina by one Timothy Handſon, whence its name.

In low damp grounds it produces very fine turf from the ſowing the ſeed; it is very luxuriant, grows high, and looks like wheat or rye.

A ſquare piece of land being divided into four parts, one part was ſown with lucern, another with ſaint foin, a third with clover, and the fourth with Timothy; the plants having grown till they were fit to be depaſtured, horſes, black cattle, cows, and ſheep were turned in together, and they all took firſt to the Timothy, which was eaten bare before either of the others were touched: it appears alſo, from farther experiments, that they are not leſs fond of it in hay.

When it is intended for hay it ſhould be mown when in full ſap, and juſt before it flowers.

This graſs thrives well in land covered with water; it will therefore be worth the attention of gentlemen that have eſtates in Ireland, being well adapted to their bogs.

A cure for the diſeaſe of black cattle, called the yellows, *generally the effect of cold taken when firſt put to graſs in the ſpring.*

The ſymptoms of this diſeaſe are, a ſhaking of the beaſt in a morning, particularly the hinder parts; hollowneſs of the eyes, and ſtaring of the hair; a dry noſe, hanging of the ears, ſwelling of the dewlap, the glands of the ears, the ſhoulders or flanks, and of one or more quarters of the udder, with a ſudden decreaſe of milk, and a yellowneſs of that which remains.

When theſe ſymptoms appear, or even in thoſe which denote a more advanced ſtage of the diſtemper, the following rules muſt be obſerved.

Suffer no blood to be taken away.

Take a handful of rue-tops, and the ſame quantity of celendine; ſhred them ſmall, and mix with them one ounce of turmerick-root in powder, and put them into three pints of ſtale old beer or ale, and juſt boil it up; when it has ſtood till it is milk-warm, give it to the beaſt, and repeat it at about forty-eight hours diſtance: theſe two drinks will generally effect a perfect cure.

There is no occaſion to keep the beaſt in, either before or after, unleſs the inclemency of the weather makes it neceſſary.

If a ſcowering comes on after the firſt drink, give the following before the ſecond.

Boil two pounds of oak bark in a gallon of water, till a fourth is conſumed; ſtrain it; in this water boil two pounds of rice till it is ſoft; mix with it half a pound of the burnt cruſt of bread, taken from the under ſide of the loaf, and to all this put two quarts of milk; let it boil twenty minutes, divide it into two parts, and give it to the beaſt warm, one at a time.

A remedy for the ſcab *in ſheep.*

Some men who breed and feed a great number of ſheep, have been groſly miſtaken in their comprehenſion of the nature of this diſtemper, which they raſhly judged to be merely cutaneous; whereas, when a ſheep has the ſcab, the blood is always more or leſs affected by it: therefore the outward applications, which are in general alone reſorted to for a cure, do for the moſt part more hurt than good, by driving in the eruption, and making it fix on the internals, therefore often occaſioning the death of the animal.

Now the true way to treat this diſorder is, firſt to give the animal ſomething inwardly, to drive out the eruption; then comes, with propriety, the outward application, which completes the cure by killing the ſcab.

When a farmer has any of his flock afflicted with the ſcab, let him attend to the directions which follow.

Take a gallon of ſoft well or pond water, which divide into two equal parts: in one of theſe parts diſſolve eight ounces of old hard ſoap; to which, when it is diſſolved, add two ounces of ſpirits of hartſhorn and ſeven ounces of common ſalt, with four ounces of roll brimſtone, beat to a fine powder and ſifted: then take the other part of the water, in which put two ounces of tobacco leaf, and one of white hellebore root: boil this ſecond part till you have a ſtrong infuſion, after which ſtrain it clear from the leaves and roots.

When you have got thus far in the proceſs, take that part of the water, firſt mentioned, and ſet it over the fire; let it boil for about half on hour, keeping it continually ſtirring with a wooden ladle during that time: in the mean time heat again the other part, in which the tobacco and hellebore were infuſed; and when it is hot, mix the two parts gradually together over the fire, keeping the mixture continually ſtirring till it is taken off the fire, which ſhould be in about a quarter of an hour: when it is quite cold, let it be put into a ſtone bottle, in order to its being kept in a cool place for uſe.

Then take four quarts of new ale or beer: put into it twelve ounces of common ſalt, two ounces of bay ſalt, and eight ounces of pounded nitre, together with twelve ounces of pounded roll brimſtone: ſet them over a gentle fire, and when the ale boils, take off the ſcum; let it boil for about half an hour; after which, ſet it by till it is cold, and put it into a ſtone bottle for uſe.

When you are ſo far prepared, take one quart of ale; ſet it on the fire; mix into it, by degree, three ounces of flour of brimſtone; when it is juſt ready to boil, take it off the fire, and let it ſtand to cool; and when it is only blood-warm, give this quantity inwardly to three ſheep, which is to be repeated every ſecond day, till they have had three doſes. This will drive out the diſorder, when the firſt mixture is to be rubbed on the diſtempered parts; and two days afterwards, the ſecond; and ſo alternately for about eight or ten days, till the cure is effected: ſometimes two rubbings will be ſufficient. That all theſe mixtures will be beſt boiled in a well-glazed earthen or iron pots.

The beſt method of ſpending turneps by feeding ſheep, communicated by a gentleman of Northampton.

I fed them off by the fold; but I firſt turned in ſome ewes, which greedily devoured all the tops and leaves: when they had finiſhed them, I immediately folded my ewes on a freſh ſpot.

After the leaves were eat off the firſt ſpot encloſed by the hurdles, by the ewes, I turned in ſome wethers, which eat with a very good appetite the apples of the roots, leaving, however, the lower part ſcooped out in the ground: theſe I had forked up, and they were eat by my ſtore-ſheep.

My neighbours were convinced my method was right, becauſe I evidently kept and fattened more ſheep on the ſame quantity of land, than they did; yet they begged I would give them my reaſons for this my practice.

I told them I would readily comply with their requeſt, and the more ſo as it might be a means of tempting them to imitate what they ſaw practiſed with ſucceſs.

Continuing my diſcourſe, I informed them that many years experience, and conſtant obſervation, had convinced me, that if you turn a parcel of ſheep promiſcuouſly into a field of turneps, the ewes and lambs would immediately attack the leaves; the fattening wethers would, for the moſt part, prefer the apple of the root; and the ſtore-ſheep, not being nice, would indiſcriminately devour both leaf and apple, and even eat the leavings of either of the others.

I farther informed them, that I had frequently obſerved, that when a parcel of wethers have been turned into a piece of turneps, the farmer, thinking to have no waſte, generally kept them in till they have eat the roots clean up. But this is very bad huſbandry; for, after the wethers have eat the moſt delicious and ſweet part of the root, they loathe the reſt, which is generally gritty, dirty, and ſodden, inſomuch that nothing, but abſolute hunger, will tempt

tempt them to taſte it. In this period they pine, and loſe fleſh; and by the time they are turned into a freſh bite of turneps, they are but little better than they were at firſt.

The appetite of a beaſt that is fattening ſhould be tempted, not palled; and undoubtedly, ſuch of the ſheep as are moſt forward will be moſt delicate; and this delicacy, if the farmer is wiſe, he will indulge, as it will eventually turn out to his advantage.

Thus, in my manner of feeding turneps, the ewes come firſt, becauſe they prefer the leaves; the wethers that are to be fattened follow, and make the moſt pure and ſweet repaſt; and the ſtore-ſheep, which are the leaſt nice of any, come laſt, and clear off the remains; at leaſt, as much of them as they ought to be permitted to eat; for I do not hold it good to oblige them to eat what are in a half putrefied condition, and ſodden with dung and ſtale.

My neighbours were ſo well pleaſed with my reaſons, and ſo well convinced by what they ſaw, that they are determined to adopt my practice; and if any of your readers ſhould be of the ſame mind, it would give me great pleaſure, as I cannot feel a truer joy than what reſults from my endeavours to be of ſervice to my fellow creatures.

I am,

Northampton, Yours, *&c.*
May 3, 1764. CLERICUS,

The great benefit of ſalt to cattle, with the method of uſing it.

It is believed the farmers in England do not known the great advantages which may be derived from the uſe of ſalt in the buſineſs of fattening cattle; whereas in America they think it, in a manner, abſolutely neceſſary, and accordingly give it to almoſt every kind of cattle; and thoſe with parted hoofs are particularly fond of it.

Horſes are as fond of ſalt as black cattle; for in America if they are ever ſo wild, they will be much ſooner brought to a handful of ſalt than any kind of corn whatever.

In the Plantations they alſo give ſalt to their ſheep; and to this practice is it generally aſcribed, that the American cattle, in general, are ſo much more healthy than the ſame animals in England: certain it is, that they are there ſubject to much fewer diſeaſes.

There is one very advantageous practice they have, which cannot be enough recommended to the notice of the farmers in England: it is mixing ſalt with their hay-ricks when they ſtack it, in the following manner; that is, as ſoon as a bed of hay is laid about ſix inches thick, let the whole be ſprinkled over with ſalt; then another bed of hay laid, and again ſprinkled in like manner; and this method follow till all the hay is ſtacked.

When the ſeaſon comes for cutting this hay, and giving it to the cattle, they, ſo far from refuſing it, will eat it with ſurprizing appetite, and prefer it before the ſweeteſt hay, that had not been in this manner ſprinkled with ſalt. And there is another advantage attends it, although the hay were in a manner ſpoiled by the rain, and almoſt rotted in the field, yet, if preſerved in this manner, it will ſpend as well as if it had been got in never ſo favourably.

In Spain, the firſt thing the ſhepherd does when the flock returns from the ſouth to their ſummer downs, it is to give them as much ſalt as they will eat; every owner allows his flock of a thouſand ſheep one hundred aroves or twenty-five quintals of ſalt, which the flock eats in about five months; they eat none in their journey nor in their winter walk. This has ever been the cuſtom, and it is the true reaſon why the king of Spain cannot raiſe the price of ſalt to the height it is in France, for it would tempt the ſhepherds to ſtint the ſheep, which, it's believed, would weaken their conſtitutions and degrade the wool. The ſhepherd places fifty or ſixty flat ſtones at about five ſteps diſtance from each other, he ſtrews ſalt upon each ſtone, he leads the flocks ſlowly through the ſtones, and every ſheep eats to his liking. But then they never eat a grain of ſalt when they are feeding in limeſtone land, whether it be on the graſs of the downs, or on the little plants of the corn fields after harveſt-home.

N. B. If any of our ſenſible and ingenious correſpondents ſhould chuſe to make remarks or improvements on any of the above hints, or are poſſeſſed of any uſeful diſcoveries in manufactures, commerce, agriculture, &c. and are willing to convey them to the public for the benefit of others, we take this opportunity of aſſuring them, that the *General Magazine* is conducted entirely upon a public ſpirited plan, and will always thankfully receive the favours of ſuch correſpondents; and, paying the utmoſt deference to their contents, communicate them to the public with the greateſt care and accuracy; and where neceſſary, ſuch uſeful diſcoveries or ſentiments, ſhall be farther enforced and explained by elegant copper-plates.

A Representation of a COAL WAGGON, by John Buddle, 1764.

Engraved for the General Magazine, *for W. Owen, at Temple Bar.*

To the Authors of the General Magazine.

Gentlemen, *Loaning-Houſe*, near *Cheſter-le-ſtreet*, *May* 1, 1764.

I Make no doubt of it, you are as ready to oblige and gratify the curioſity of your readers, as the authors of other publications of a like nature; —— If then, the following draught and deſcription of a *Coal-waggon*, (ſo uſeful, for the conveyance of coals from the Coal-pits where they are wrought, to the Coal-ſtaith, where they are depoſited in the keels, in order to be forwarded to the ſhips, and thence conveyed to ſeveral parts of the known world;) be thought worthy a place in *your entertaining collection*, it will greatly oblige many of your north-country readers, and particularly,

Gentlemen,
Your very humble Servant,
John Buddle.

Deſcription.

A. repreſents the body of the waggon, loaded with coals. B, drawn by a ſingle horſe C, by means of the traces *a*, *a*, and conducted or drove by a ſingle man, called the *Waggon-man*, whoſe moſt common action on the road is, enticing his horſe forward with a bit of hay in his hand, which he ſupplies from under his arm *b*. The quantity of hay ſufficient for a day being kept in the Hay-poke D. The body of the waggon is in form of an inverted priſmoid, compoſed of pretty ſtrong fir deals, having ſtrong pieces of oak or aſh wood at the bottom called Soals, at the corners and ſides called Sheths, and at the top, called Overings, which are occaſionally raiſed with Ledges to make the waggon hold any additional quantity.

The top of the fore part of the waggon projects farther out than the bottom; therefore the greateſt part of the loading is ſupported on the fore wheels, and conſequently the waggon, when in motion, is drawn with leſs force than if the fore part did not project at all: The draught is alſo leſſened by the fore-wheels being conſiderably larger than the hind, as was elegantly demonſtrated, experimentally, by Dr. Rotherham at Newcaſtle, in his lecture on Wheel-carriages.

E. is the Convoy, being a ſtrong curving piece of Alder-wood, whoſe end (*c*) is kept indifferently tight in the Ring-iron (*d*) by little wedges called Scotches, depoſited in a box (*e*) called the Scotch-box, and kept from touching the wheel by hanging its end (*f*) in a loop of leather (*g*), faſtened to the hind Corner-Sheth of the waggon; its uſe is to regulate the motion of the waggon down the ſides of the hills (called by the Waggon-men, Runs) making it uniform, which, by the laws of motion would be accelerated, was no ſuch regulation to take place; the Waggon-man, taking the end (*f*) out of the loop, lets it down upon the wheel, and placing himſelf aſtride upon the end (*f*), with one foot on the waggon-ſoal, he preſſes more, or leſs, according to the nature of the declivity of the Run; the Convoy acting at that time, as a leaver of the the 2d kind, whoſe fulcrum is in the Ring-iron (*d*) and the friction of the Breaſts (*b*, *b*), (either of which may be uſed at pleaſure) regulates the motion: the large iron (*k*) is called the Hind-iron, and hinders the convoy from ſlipping off the ſide of the wheel.

Waggon-men, in going down very ſteep Runs, commonly take their horſes from before, and faſten them behind their waggons; as, they would inevitably be killed was the convoy to break (which frequently happens) or any other accident occaſion their waggons to run *amain*, nor is this fatal conſequence only attendant on the horſes, but the drivers often receive broken bones, bruiſes, and frequently the moſt excruciating deaths: —— Indeed, in ſome places, a moſt humane cuſtom is eſtabliſhed, which is, when any Waggon-man loſes his horſe, the other Waggon-men go a Gait for the poor ſufferer, which is little out of their profits, and purchaſe him another horſe.

When the waggon arrives at the Staiths, he lets down his Bottom-board, which is the bottom of the waggon, having Hinges on one ſide, and a Haſp on the other; and the coals run down an opening in the waggon-way under the waggon, which has a box projecting off the dike of the Staith, upon the water, under which the keels are placed which receive the coals; ſometimes when there are no keels at the Staith, the waggons are emptied into the Staith-houſe, from thence to be loaded in the keels by barrows. If a waggon-man chance to break the axle of his wheel, ſo that his waggon falls, it is called a Cold-pye; and the cuſtom is, if he can but get a *ſhovel-full* of coals carried in his waggon to the Staiths, he is paid for his Gait, otherwiſe not.

The waggon is drawn back from the Staiths to the pit, with the end F foremoſt, as it would be a very ſtraining jobb for any horſe to pull it about. As the waggon is going to the pit the convoy is prevented from jumping out by a pin put through it, between the Ring-iron, and its end, called the Loiter-pin. The waggons are drawn from the pits to the Staith and back again,

Engraved for the General Magazine, for W. Owen, at Temple Bar.

on the Waggon-ways, which are parallel Rails of wood, on which the wheels run; there are commonly two of these ways at a little distance from each other, that which is nearest to a level, and on which the loaded waggon goes, is called the Main-way; and that on which it returns the Bye-way.

This little description is intended for a *pill*, to set the heads of the great *coal viewers*, and *connoisieurs* to work; to give the world a clear and succinct account of the present *method* of working coals, which has never, as yet, been done, that I have heard of; and for the satisfaction of the *curious*.

JOHN BUDDLE.

A letter from Sir George Yonge, Bart. member of parliament for Honiton in Devon, to Mr. Richard Northcote, Portreve of that Borough.

SIR,

YOU desired in your last letter to know from me the truth of many things which had been *asserted* concerning the great question, which was agitated in parliament last February. The manner in which I will now state to you the whole of that question will, I hope, justify the credit you give me. You will see by it the reasons which moved and determined me upon that occasion.

There are three things to be considered with relation to the late proceedings concerning the issuing general warrants: 1st, The manner of issuing and executing such warrants. 2d, How far they can be justified in point of law. 3d, The propriety of the proceedings of the H—— of C——s, upon the complaint made of a breach of privilege. With regard to the first head, (which I shall confine to the matter of fact) it appears, that lord H————, on the 23th of April, 1763, issued a warrant to apprehend the authors, printers, and publishers, of a seditious paper, intituled, "The North Briton, No. 45, to seize them, *together with their papers*, and bring them in safe custody to be examined before him." This warrant was granted, not only without information upon oath, but without any information at all; (as appeared on the trial of the messengers) for it was directed to three messengers by the S————y of S——e, to go to Mr. C————n, (another Messenger) in order to learn from him whom they were to suspect, in what manner they should proceed, and what persons he should advise that they should take up. They were informed by Mr. C————n, that, from the information he had received, he was of opinion, that one Leach, and others, were the printers and publishers of this paper, and that he had been informed that one Mr. Wilkes, a person supposed to be the author of the North Briton, had been seen frequently in Mr. Leach's house of late, and that an old Printer, whose name he did not mention to the messengers, had told him, that the said Mr. Leach was the printer of the said paper. Upon this extraordinary information, the messengers thought fit to exercise the discretionary powers, delegated to them by the S————y of S——e, against Mr. Leach; entered his house, seized him and *all his papers*, and also all his servants, whom yet they never carried before lord H————, as directed by the warrant, but after twelve hours confinement in an alehouse, discharged them. Leach was kept in confinement several days, and then released.

On the 26th of April lord H———— issued another warrant in the same general form, whereby one Balse, a Printer, and one Kearsley, were taken into custody. Upon the information of this latter person, Mr. Wilks was apprehended on the 30th of April, by *verbal order* given to the messengers; so that Mr. Wilkes was apprehended *without any warrant at all*; no other but that of the 26th of April having been issued, the execution of which against Balse and Kearsly, was, or ought to be, the legal return of that warrant; and the information whereby Mr. Wilkes was apprehended being subsequent to that return, there remained properly no authority to apprehend Mr. Wilkes, but the *verbal order*. However under this authority, Mr. Wilkes was seized, and Mr. W———d and Mr. W———b, with others, took possession of his house, and carried away in a sack *all his papers* that could be found.

Upon immediate application to the court of common pleas, a writ of *Habeas Corpus* was ordered. This the S————s of S—— were soon informed of; whereupon they shifted the custody of the prisoner, and committed him to the Tower; so that the effect of that *Habeas Corpus* was eluded, and he was kept close prisoner, debarred the use of pen and ink, and the sight of his friends.—Thus much as to the matter of fact. How far these proceedings can be justified by the laws of this country, is the next consideration.

It is universally agreed by all judges, by all the writers on the law, that a *general* war-

warrant not expreſſing the *name of the party* to be apprehended, is void in law: for it is leaving it to the arbitrary diſcretion of a common officer to arreſt perſons, and ſearch what houſes he thinks fit; and the ſeizure of *papers* has freqently been condemned as illegal. However, to juſtify the warrants iſſued by lord H———, the *practices* of the S——— of S——'s Office has been mentioned and called an USAGE, and Mr. PITT's adminiſtration has been quoted to ſanctify ſuch proceedings. To this three anſwers may be given; 1ſt, That the practice is but modern, and but ill called *uſage*, taking its idea and its riſe from the licenſing act and the arbitrary days of Charles II. nor is the practice conſtant or uniform, for all the precedents differ. 2d. If uſage had been proved, it could not make that *juſtifiable*, which is *illegal*; for uſage in matters of law, that are doubtful, is a good expoſitor of the law; but uſage againſt law, is oppreſſion. 3d, Mr. Pitt's adminiſtration affords no ſuch precedent; two warrants only appear iſſued by Mr. Pitt, one for the ſeizure of certain perſons on board a certain ſhip going to France; the other for apprehending the Count de St. Germain, a foreigner, and ſuppoſed to be a ſpy. Theſe were iſſued in the midſt of a war with France, not for libels, but as in caſes of High Treaſon, and the cauſe juſtified the proceeding. In like caſes S———s of S——e have before this time iſſued general warrants. But the honour of being the champions and defenders of a proceeding, which no lawyer in the kingdom dared ſay *was legal*, ſeemed reſerved for *the preſent invaſion of our liberties*. And as to the cloſe confinement in the Tower, it will be difficult to find a lawyer that will aſſert, that a man, upon a bare charge of a miſdemeanor, may be kept cloſe priſoner, and diſabled of the opportunity of obtaining bail, which, in caſe of a miſdemeanor, he was intitled to. I have ſhewn you therefore the manner of the proceeding, and, I think, the illegality of it; the propriety of the proceedings of the H——— of C——— upon this occaſion, remains to be determined.

I ſhall begin by obſerving, that the matter was firſt opened to the H—— upon *general grounds*, ariſing out of the complaint which had been introduced againſt Mr. Wilkes in the beginning, and ſo purely for the honour and dignity of the H———, and the rights of the ſubject, without the leaſt regard to individuals; that it was *by the direction of the H———*, formed into a complaint againſt Mr. W———d, Mr. W———b, and the meſſengers. In this manner it was received and examined into by the H———. And here the juſtification of the gentlemen, againſt whom the complaint was formed, by order of the H——, as a means to come at the legality of the warrant iſſued by lord H———, certainly depended upon a proof of the validity of it; and Meſſ. W———b, W———d, &c. could only be guilty, if the warrant was illegal. For this reaſon it was neceſſary to propoſe the following general queſtion: "that a general warrant for apprehended and ſeizing the author, printers, and publiſhers, of a ſeditious libel, together with their papers, is not warranted by law." Yet when this queſtion was propoſed, (the matter of fact having been gone through) the conſideration of it was declined, in order to diſcharge the complaint againſt W—b, W—d, &c. previous to the examination into the legality of the warrant; upon what ground of reaſon, law, or juſtice, is not eaſy to be conceived, there being ſuch a connection between the general warrant, and the perſons complained of, that the *H——— had determined*, that nothing could ſeparate them in the beginning; nothing therefore could equal the inconſiſtency, firſt to diſcharge *the order of complaint*, and then, the next day, to go into the conſideration of the legality of the warrant. However, having done this, the queſtion was then altered, by adding theſe words; "although ſuch warrants hath been iſſued according to the practice of office, and hath frequently been produced to the court of King's Bench, and as far as appears to this H——, the validity thereof hath never been debated, but the parties have thereupon been bailed by the court." The queſtion, thus altered, was then conſidered. The *illegality* of the warrant was *aſſerted*, and not *diſputed*: yet, it was reſolved to put off coming to any reſolution upon this queſtion for four months, becauſe it was improper to give any opinion upon this matter, being a point of law that was then depending in the courts of juſtice, where the queſtion was *ſub judice*.

To this a full anſwer may be given; 1ſt, It has been the cuſtom, and a matter of attention in parliament, to declare upon theſe points. To prove this, many precedents of various kinds might be produced. I ſhall content myſelf with theſe: when the crown was endeavouring to introduce a general exciſe, and the troubles in England, occaſioned thereby, were quickly followed by the Scotch invaſion, two Engliſh peers, the earl of Warwick and lord Brook, being ſuſpected of holding correſpondence with the Scoth rebels, were, in time of privilege, apprehended by warrants from the Secreta-

ries of ſtate, their houſes entered, and ſearched, *their papers ſeized*, and their pockets rifled. This produced a complaint in November 1640, againſt the ſecretaries of ſtate who iſſued, and the clerk of the council who executed, the warrants. On the occaſion, though the caſe was not a caſe of privilege, yet the warrant being general, and to ſeize all papers, was declared illegal, and the illegality of the proceeding being againſt two members of parliament, was declared a breach of privilege. Satisfaction was then made to the two injured lords, and the clerk of the council firſt brought upon his knees at the bar of the houſe of lords, and afterwards committed to priſon. Again, in 1680, Sir William Scroggs, lord chief juſtice of the King's Bench, iſſued general warrants, to ſeize ſuch ſeditious books, libels, and pamphlets, as the meſſengers of the preſs ſhould be informed of. Upon this the Houſe of Commons reſolved, that the warrants were arbitrary and illegal, and impeached the judge. Yet this caſe, though ſo highly reſented by the houſe, is plainly not ſo flagrant and offenſive as the warrants iſſued by lord H——. In 1692, a complaint was made by lord Malborough, and others, of a breach of privilege, having been committed to the Tower without information on oath, and, of a diſcharge of bail being refuſed, in time of privilege. On this occaſion a bill was propoſed to indemnify ſecretaries of ſtate for ſuch commitments in treaſonable caſes, and to limit their powers by law; but the Houſe of commons refuſed to give any ſanction, any definition to ſuch powers, even by limitting them; but reſolved, that the powers being illegal, the ſecretaries of ſtate, exerciſing them at their PERIL, ſhould be juſtified only by the caſe.

NEXT, as to the trials depending in the courts below, the queſtion of the warrants has not yet come in iſſue before the court. In one trial only brought by Leach againſt the meſſengers, they defended themſelves under the warrant: the judge was of opinion that the warrant was illegal; and the jury found, that though the warrant had been legal, the meſſengers had not proved their juſtification: ſo that the fact being found againſt them, as well as the law, no exception could lie as to the warrant. Mr. Wilkes's action againſt lord H——, may bring the matter in queſtion; but privilege on the ſide of the S—— of S——, and inability on the ſide of Mr. Wilkes's, have hitherto prevented the trial of this, and *may* for ever prevent the bringing the matter before the court, ſo as to receive a judicial determination. It can therefore ſcarcely be alledged, that the matter is depending and *ſub judice*. But ſurely if it were, the recollection of the enquiry into Mr. Wilkes's caſe, in the beginning of the ſeſſion; of the parliamentary reſolution, ſentence, and puniſhment of him, when the matter was indiſputably depending, and *ſub judice* (an information being at that time filed againſt him in the court of King's Bench, without a poſſibility in Mr. Wilkes to prevent the matter from coming to trial) muſt be ſufficient to determine the propriety of our coming to a reſolution upon this occaſion, although ſuits were depending in the courts of law.

It appears then, that a S—— of S—— arming his meſſengers with extraordinary juriſdiction and powers, on the occaſion of a libel, directs them, having no information himſelf, to get information (from Mr. C——n if they could) and to exerciſe theſe powers in ſuch manner, and againſt ſuch perſons as their informer ſhould think fit to adviſe. By means of this power, which *regal authority* itſelf could ſcarce delegate, (which I might have felt, and might have reached *you*, however diſtant or innocent) ſeveral of his majeſty's innocent ſubjects were oppreſſed; till at length the whole weight of this power, grown impatient, and diſdaining the trouble of a ſecond warrant, fell, by a *verbal order*, on Mr. Wilkes, a member of parliament. To which may be added, that unprecedented and preſumptious attempt, by which the operation of the *Habeas Corpus* act was evaded, and that great bulwark of our liberties rendered of no effect. In ſuch a caſe, and in the courſe of ſuch an enquiry, *originally introduced by the* CROWN, the H—— finding that ſuch and ſuch proceedings had happened, I could not conſent; I am ſure you would have thought me wanting to my country and to my duty, if I had approved of paſſing theſe things over in ſilence, without endeavouring to prevent them for the future, and without coming to a ſeaſonable parliamentary reſolution upon the queſtion, leaving nothing to poſterity, in the V——s of the H——e, but what furniſhes, from the nature of it, the only precedent, perhaps, upon record concerning this matter, in favour, as it certainly is *at preſent*, of the validity of ſuch warrants. I have given you now, I hope, a ſatisfactory account of this great matter.

I am, Sir, &c.

The following is a tranſlation of a letter from the Spaniſh General to the Commanding Officer in Honduras Bay.

SIR,

THE king, my maſter, having appointed me to the employment of governor and captain general of this province, with eſpecial order to comply entirely with what his majeſty granted to the crown of England, and ſtipulated in the 17th article of the definitive treaty of peace, ſigned at Paris the 10th day of February this year, commanding me likewiſe that with all poſſible diſpatch I ſhould proceed on my voyage, which I could not do ſo ſooh as I deſired, for various diſappointments which happened, I arrived at Campeachy the 7th inſtant, and having taken poſſeſſion the 24th, I was informed of your arrival at Balis in the month of April, alſo five veſſels, and that immediately the people were diſperſed as far as Rio Hondo, practiſing from that time the cutting of logwood, by virtue of the treaty of peace. You did not preſent the royal ſchedule that my ſovereign expedited for this end, nor the licence of the king of England for the aforeſaid effect.

This being granted, I am obliged by the king my lord, in his royal confidence of the government of this province, and to comply entirely with the ſaid 17th article of the definitive treaty, as I ſaid before, to diſpatch the commandant of the fort of Bacalar, Don Joſeph Roſado, with this, requiring you, that in conſideration of the want of inſtruments for your introduction, and having extended yourſelves, gathering fruits, as in your own country, without waiting to ſettle the limits with the neceſſary ſolemnity that ſhould have ſecured your eſtabliſhment, you will be pleaſed, with all ſpeed, to give the neceſſary advice to all your community that are in Rio Hondo, to retire to Balis, and I expect you will preſent me with the royal ſchedule that the king, my maſter, diſpatched to this end, or with orders from the king of Great Britain for this effect; and there is no doubt but I ſhall then attend to it with that care and equity I am commanded, iſſuing for that purpoſe the neceſſary orders to all the commandants, cabos, military and juſticiary of all the diſtricts in their juriſdiction, by which means the ſuſpicion of the fatal conſequences will ceaſe, which will be inevitable if ſuch conduct is continued, ſufficient to deſtroy the good harmony between the two nations, and happy tranquility we enjoy; if the remedy is not occurred to in time, and our ſovereign will manifeſtly ſee how we intereſt ourſelves, that their juſt and laudable intentions take effect, for which I am ſo ready on my part, as is manifeſt by my toleration, and you and all your nation remain at Balis, and I promiſe myſelf the ſame on your parts, proteſting always that for the reſult of what may happen by ſuch irregular introduction and exceſs of cutting logwood, thoſe who commit, or do not remedy them, will be reſponſible after all. I hope you will favour me with an anſwer by hand of the ſaid commandant of Bacalar, and other commands moſt to your ſatisfaction, to manifeſt to you the deſire I have to ſerve you. God guard you many years, as he can, and I deſire. Your moſt humble ſervant, kiſſes your hands,

Philipe Remire. de Eſtinoz.

Marida in Jucatan, 29th December, 1763.

Sir Don Joſeph Maud.

Don Joſeph Roſado, *lieutenant of infantry in the battalion of Caſtillia, and commandant of this garriſon and royal fort of St. Philip, of Bacalar, and its juriſdictions.*

NOtwithſtanding that the ſerjeant Dioniſius Chavaria, who is detached to the look-out of St. Anthony, has the neceſſary orders, that the Engliſh logwood cutters of Rio Hondo, do retreat to Balis, without permitting them to make any demur, becauſe that ſince the 4th inſtant, when the order of the governor and captain general, was by me intimated to them, they have had competent time to evacuate the river, carrying away the utenſils of their houſes: I order and command the ſaid ſerjeant, that he receive eleven ſoldiers of this garriſon, well armed, which with four there before, completes the number of fifteen, to remain at the ſaid look-out; that with them he is not to permit any Engliſh veſſel, under any pretext, to enter the mouth of this river; on the contrary, if any flats remain in the river, they are to go out, with the utenſils of their houſes, with ſo much brevity, as not to permit them to ſtop any where, but retire totally; as likewiſe thoſe from the new river, becauſe in the order intimated to them, it is expreſſed, that the retreat ſhall be to Balis, and no other part; and to act on the contrary, they expoſe themſelves to evident danger, as by their diſobedience they loſe their negroes, and find themſelves under a violent arreſt. This order he ſhall manifeſt to as many as are not yet gone out, that by this means it arrives at the notice of all the baymen, and at no time they may plead ignorance. And all that is done on the ſubject by the ſaid ſerjeant, he ſhall give me punctual advice; as alſo of what may occur, to adviſe his excellency the governor and captain general, from whom I have orders to execute what may be needful;—in caſe of contumacy, diſobedience,

or

or rebellion, laying to the charge of the baymen, all the reſult that may happen between the ſovereigns, for not executing what they are ordered, and that it appears to the ſaid ſerjeant what is hereby ordered; and that he fulfil his obligation with that zeal, love and conduct he ought. This order is given in this garriſon and royal fort of St. Philip, Bacalar, this 22d of February, 1764.

Joſeph Roſado.

I, the ſerjeant Dioniſius Chavaria, certify, that the above is a true copy of the order I received this day from the commandant Don Joſeph Roſado.

Jo. Maud,
Ja. Grant, *Dioniſius Chavaria.*
Stephen Archbold.

To his excellency William Henry Littleton, *Eſq; governor and captain-general of the iſland of Jamaica, and other the territories there-unto belonging, chancellor and vice-admiral of the ſame, &c. The humble petition of the principal ſettlers on the Bay of Honduras, for cutting of logwood, and the commanders of veſſels now lying there to load.*

THAT your petitioners by virtue of the preliminary treaty of peace (in the 16th article whereof it is ſtipulated, that the ſubjects of his Britannic Majeſty ſhall have the privilege of cutting and carrying away logwood in the Bay of Honduras, with liberty to build houſes and magazines, neceſſary for themſelves and families) in the month of April laſt year, came down here for the aforeſaid purpoſe of cutting logwood; and on their firſt arrival, diſpatched a letter to the commandant of Bacalar, being the neareſt Spaniſh ſettlement, who returned for anſwer, that he would tranſmit it to the governor and captain-general of the province of Jucatan, whoſe orders on the ſubject, he, the ſaid commandant, communicated to your petitioners, which was to comply entirely with the 16th article of the preliminary treaty of peace.

This afterwards, by virtue of a letter from the ſaid governor of Jucatan, No. 1, in the anſwer to a letter from Joſeph Maud, one of your petitioners, a copy of which is No. 2, ſeveral of your petitioners went into Rio Hondo, to cut logwood; and from that time unmoleſted followed their occupations, till the 4th of this inſt. February, in good harmony and correſpondence with the Spaniards, by frequent letters from the governor of Jucatan, and anſwers by Joſeph Maud, one of your petitioners, all hereunto annexed, at which time Don Joſeph Roſado, Commandant of Bacalar, delivered the ſaid Joſeph Maud, one of your petitioners, the letter from the governor of Jucatan aforeſaid, N. 3, ordering your petitioners to retreat to Balis, till they produced either a ſchedule from his Catholic Majeſty, or orders from the King of Great Britain, to authorize them to cut logwood. In conſequence whereof, your petitioners, with all poſſible diſpatch, endeavoured to withdraw their effects to the New River and Balis, in both which rivers your petitioners had formerly ſettlements. But on the 23d inſtant they were again diſturbed, by an order from the commandant of Bacalar, directed to the ſerjeant of the guard at the mouth of Rio Hondo, an authentic copy of which is likewiſe annexed, No. 4, by which your petitioners are ordered to evacute every river except Balis, where it is admitted them to ſtay a little while, but, as your petitioners believe, not to have the privilege of cutting logwood even there; that your petitioners are hereby driven to the greateſt diſtreſs, not having any plantations to maintain themſelves and families; that by means of ſo total a ſtagnation of buſineſs, many of your petitioners, and commanders of veſſels, that have lain for ſome time here, are in the greateſt danger of wanting proviſions; that they have diſpoſed of their cargoes to your petitioners, the ſettlers, who, by reaſon of being driven from their occupations, are incapable of paying for them; and that the veſſels lately arrived, not ſeeing any proſpect of immediate payment, refuſe to ſell their proviſions.

Theſe are the miſeries your petitioners experience from the inhumanity of the Spaniards.

And your petitioners likewiſe humbly repreſent to your excellency, that not having any legal authority for ſettling diſputes with each other, they find themſelves reduced to a ſtate of anarchy and confuſion, nor have the injured any method to ſeek redreſs; that your partitioners humbly apprehend, that without order it is impoſſible for any community long to ſubſiſt.

Your petitioners therefore humbly pray, that your excellency will be pleaſed to grant them ſuch relief as their own diſtreſſed circumſtances require, and your great wiſdom ſhall direct; and your petitioners ſhall ever pray.

MATHEMATICAL CORRESPONDENCE.

A Demonſtration of a General Propoſition, of which the 47th E. 1. is only a particular caſe.
By Mr. Thomas Moſs, *of* London.

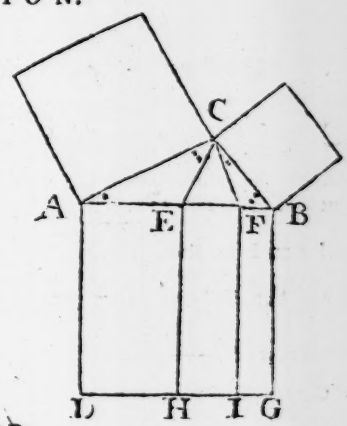
PROPOSITION.

IN any plane triangle whatever, as A C B, the ſum of the ſquares of the two ſides, A C, C B, including the vertical angle C, ſhall be equal to the ſquare of the remaining ſide, A B, increaſed, or diminiſhed, by the given rectangle, E I.

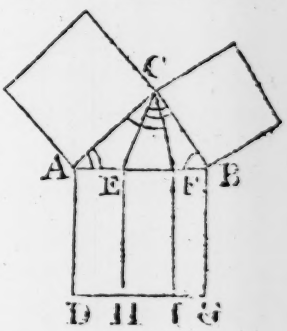
DEMONSTRATION.

MAKE the angle A C E = angle B, and the angle F C B = angle A: then, by ſimilar triangles, A E : A C :: A C : A B (A D); therefore, A E × A D = A C².

Again, by ſimilar triangles, F B : B C :: B C : A B (B G), therefore F B × B G = B C²; conſequently the ſum of the rectangles E D and F G = A C² + B C², or A B² — the rectangle E I = the ſum of the ſquares made upon the ſides A C and B C. *Q. E. D.*



Make the angle A C F = angle B, and the angle E C B = angle A; then, by ſimilar triangles, A F : A C :: A C : A B (A D); therefore A F × A D = A C²: Again, by ſimilar triangles, E B : B C :: B C : A B (B G), therefore E B × B G = B C², conſequently A F × A D + E B × B G (= A B² + the Rectangle E I) = A C² + B C²; that is, the ſum of the rectangles F D and E G = A B² + the rectangle E I = the ſum of the ſquares made upon the ſides A C and B C. *Q. E. I.*



Corollary.

Hence it follows, that when A C B is a right angle, the rectangle E I vaniſhes, or the two lines F I and E H coincide; and therefore, the ſum of the ſquares formed on the ſides A C and B C, will then be exactly equal to the ſquare made on the ſide A B.

To the AUTHOR *of the* GENERAL MAGAZINE.

SIR,

THough I cannot contradict Mr. Walker * *(vide page 189)* in ſaying the queſtion was not extant before I propoſed it; yet I beg leave to aſſure you, that I did not know that it was, for the Palladiums are works unperuſed by me: I very much commend your detecting all ſuch like practices, but beg leave to have juſtice done me among your readers, by inſerting this in your magazine; and be aſſured, that whatever I ſend is of my own production, except mentioned to the contrary.

J. BANKS.

MATHEMATICAL QUESTIONS, *anſwered.*

Queſt. 17, *anſwered by Mr.* Thomas Adams, *of Orwell, in Cambridgeſhire.*

PUT m = circumference of a circle whoſe diameter is unity; x = conjugate, y = tranſverſe diameter of the required Ellipſis; then $\frac{my^3}{y^2 - x^2} = p$ (by a property in

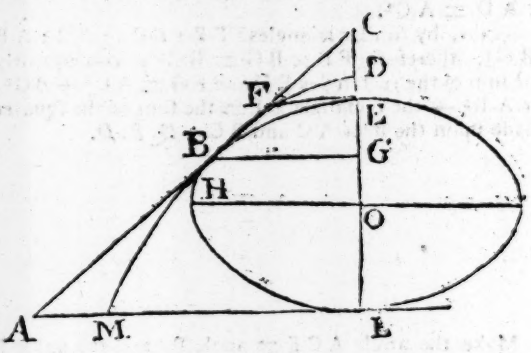
n, 3.

* *We have received Mr.* Walker's *laſt letter, and will, if he chuſes it, ſend it to Mr.* Todd; *but we judge it abſolutely improper to continue the diſpute any longer, in our work; which we ſhould wiſh to ſee filled with more intereſting ſubjects.*

n. 3, of Stone's Math. Dict. under the word Ellipſis;) and $\frac{x^2}{y}$ = Latus Rectum; alſo $\overline{y - x} \times \frac{x^2}{y}$ to be a maximum, *per* queſtion, the value of x in the firſt equation being ſubſtituted in the laſt, fluxed, &c. y comes out = $\frac{2p}{3m}$. W. W. R.

This queſtion was alſo anſwered by Meſſrs. J. Barber, W. Sewell, *and Mr.* T. Barker, *the propoſer.*

Queſtion 18, *anſwered by Mr.* T. Barker, *of Wiſſett in Suffolk.*



FIRST, 'tis proved by the writers of fluxions, that CG = GL, whence (becauſe CD = DG) CL = $58\frac{2}{3}$; and then AL = $64\frac{2}{3}$. Put CL = a, AL = b, c = 0.7854, and x = EL, then $\frac{\overline{a - x} \times b}{a}$ = FE; but EF × AL = $\overline{HO}^2$; whence $x \times \left(\frac{\overline{a - x} \times b^2}{a}\right)^{\frac{1}{2}}$ = area of the ellipſis, a Maximum, hence $x = \frac{2a}{3} = 39\frac{1}{9}$.

Again, $\frac{\overline{58\frac{2}{3} - 39\frac{1}{9}} \times 64\frac{2}{3}}{58\frac{2}{3}} = 21.55 =$ EF, and then HO = 37,328.

This queſtion was alſo ſolved by Mr. T. Adams, *&c.* ——— *Some of our contributors aſſert, that this queſtion was borrowed from Queſt.* 8. (223) *in the Gent. Diary, for the year* 1761. *Mr.* Brown, *the propoſer, has not ſent any anſwer.*

Queſt. 19. *anſwered by Mr.* William Conditt, *of White Chapple.*

AS the two ſhips, are to be an equal diſtance from the equator, on oppoſite ſides, and but 100 miles aſunder, it is evident the eaſtermoſt ſhip muſt ſail ſouth 10 hours = 50 miles, and, conſequently, the weſtermoſt ſhip muſt ſail eaſt, northerly, till ſhe come in the latitude of 50° north. Then by plane ſailing there is given the meridian diſtance = 100, and the difference of latitude = 50 miles, to find the diſtance, which in this caſe is = 111,8 miles, which divided by 10, the number of hours the eaſtermoſt ſailed, gives 11,18 miles, the rate the weſtermoſt ſhip muſt ſail per hour, to come under the ſame meridian with the eaſtermoſt.

Nauticus agrees with the above ſolution, with reſpect to the difference of latitude and time of the ſhip's ſailing; but remarks, that the weſtern ſhip will ſail in the periphery of an ellipſis, whoſe axes are to each other in the ratio of 2 to 1; and therefore it is impoſſible that it can ſail equably, conſequently, the number of miles it ſails *per* hour will be continually varying.

Queſtion 20, *anſwered by Mr.* Thomas Allen, *of Spalding in Lincolnſhire.*

WHEN m is a poſitive integer, $\frac{v^m - w^m}{v - w}$ will be univerſally = $v^{m-1} + v^{m-2} w + v^{m-3} w^2$ (*m*) and $\frac{a^r - b^r}{a - b} = a^{r-1} + a^{r-2} b + a^{r-3} b^2$ (*r*). (Both found by common diviſion.) Now, if in the ſecond Equation we write $v^{\frac{m}{r}}$ and $w^{\frac{m}{r}}$ inſtead

inſtead of a and b reſpectively, there will ariſe $\frac{v^{\frac{m}{r}} - w^{\frac{m}{r}}}{v^{\frac{m}{r}} - w^{\frac{m}{r}}} = v^{m-\frac{m}{r}} + v^{m-\frac{2m}{r}} w^{\frac{m}{r}} + v^{m-\frac{3m}{r}} w^{\frac{2m}{r}}$ (r); by which, if the firſt equation be divided, we obtain $\frac{v^{\frac{m}{r}} - w^{\frac{m}{r}}}{v - w} = \frac{v^{m-1} + v^{m-2} w + v^{m-3} w^2 \text{ (m)}}{v^{m-\frac{m}{r}} + v^{m-\frac{2m}{r}} w^{\frac{m}{r}} + v^{m-\frac{3m}{r}} w^{\frac{2m}{r}} \text{ (r)}}$. Now, dividing the right hand ſide of the laſt equation by $v^{\frac{m}{r}-1}$, it becomes

$\frac{v^{m-1} + v^{m-2} w + v^{m-3} w^2 \text{ (m)}}{v^{m-\frac{m}{r}-1} + v^{m-\frac{2m}{r}-1} w^{\frac{m}{r}} + v^{m-\frac{3m}{r}-1} w^{\frac{2m}{r}} \text{ (r)}} =$ (by dividing numerator and denominator by v^{m-1}) $\frac{1 + \left(\frac{w}{v}\right) + \left(\frac{w}{v}\right)^2 + \left(\frac{w}{v}\right)^3 \text{ (m)}}{1 + \left(\frac{w}{v}\right)^{\frac{m}{r}} + \left(\frac{w}{v}\right)^{\frac{2m}{r}} + \left(\frac{w}{v}\right)^{\frac{3m}{r}} \text{ (r)}}$: Therefore

$$\frac{v^{\frac{m}{r}} - w^{\frac{m}{r}}}{v - w} = v^{\frac{m}{r}-1} \times \frac{1 + \left(\frac{w}{v}\right) + \left(\frac{w}{v}\right)^2 + \left(\frac{w}{v}\right)^3 \text{ (m)}}{1 + \left(\frac{w}{v}\right)^{\frac{m}{r}} + \left(\frac{w}{v}\right)^{\frac{2m}{r}} + \left(\frac{w}{v}\right)^{\frac{3m}{r}} \text{ (r)}}$$

the theorem propoſed to be inveſtigated.

This queſtion was alſo anſwered, in a very elegant manner, by Mr. G. Tytler.

Erratum: In the laſt Magazine, Queſt. 22. *line* 4th, *inſtead of* = 8, *read* = 4.

New QUESTIONS *to be anſwered.*

Queſt. 27. *By Mr.* W. Sewell, *of Wymondham.*

A Certain gentleman, after he had planted 2000 oaks, (diſtant from each other in the breadth 40, and in the length 50 feet,) found he had taken the largeſt rectangular piece of ground poſſible to effect the ſame. Query the dimenſions?

Queſtion 28. *By Mr.* John Hyde, *of Rodborough, in Glouceſterſhire.*

REquired the dimenſions of the greateſt parallelogram that can be inſcribed between the peripheries of two concentric circles, whoſe radii are 30 and 40 reſpectively?

Queſt. 29. *By Mr.* John Barber, *of Saxmundham.*

REquired the dimenſions of a cone, of the leaſt ſolidity, that will circumſcribe a ſolid, generated by the revolution of a curve about its axis, whoſe equation is $\overline{a + x^m}^{x^n} = y^v$; m, n, and v being given quantities?

Quest. 30. *By Mr.* Thomas Moss, *of London.*

SUppose b and b denote any two numbers whatever, in a constant ratio to each other, also let x be to l in a constant ratio; then will $p x \times \overline{b + \sqrt{b^2 - b^2}} \times n : \frac{2 p l}{3} \times 2 b^2 + b^2$ in a constant proportion (n and p being any given quantities); required the demonstration?

Barometrical Observations at Ganthorp, *Lat.* 53° 45′ N. *Long. from* Greenwich, 41′ W. *By Mr.* W. Hardy.

D	Inch.	D	Inch.	D	Inch.	D	Inch.
1	29.50	9	30.10	17	29.90	25	30.29
2	29.81	10	29.56	18	29.90	26	30.28
3	29.82	11	29.27	19	29.91	27	30.10
4	29.82	12	29.37	20	29.80	28	30.00
5	29.83	13	29.38	21	30.00	29	30.10
6	30.05	14	29.29	22	30.05	30	30.30
7	30.00	15	29.28	23	30.15	31	30.25
8	29.82	16	29.60	24	30.20		

POETRY.

On Conjugal Love. *Addressed to* Damon.

I.

OF what amazing force is love,
That to its like is join'd;
She builds on solid rock, and shuns
The discontented mind.

II.

Death can't divide, nor waters quench,
This fix'd cœlestial fire:
Firm to each other's interest,
They have but one desire.

III.

Each hour they live, each hour they know,
A new degree of love,
Till angel-like become, they pass
To brighter orbs above.

IV.

They strive each other to out-do,
Who shall oblige the most:
Whilst others, rent with discord, sink,
In swift distruction lost.

V.

Sweet peace the only heav'n on earth,
Their habitation bless;
The virtues and the graces come,
To wish the pair success.

VI.

No jealousy disturbs their breast,
Discreet in their affairs,
To step between, and strife create,
No busy body dares.

VII.

No evil passion, though it fawns,
To gain admittance first,
Then let in troops of armed foes,
To make the couple burst.

VIII.

No evil passion here, I say,
With all its craft and skill,
Can entrance find, love keeps the door,
And judgment guides the will.

IX.

The oracles of old declar'd
Felicity to dwell,
With Aglaus, and his virtuous spouse,
Within their rural cell.

X.

'Tis true, a longing is in love,
Or love it could not be;
For he that loves with much desire,
His fav'rite longs to see.

XI.

Lust, like a hurricane, destroys,
Like lightning, quick it burns;
When the first gust is o'er, this love
To greater hatred turns.

XII.

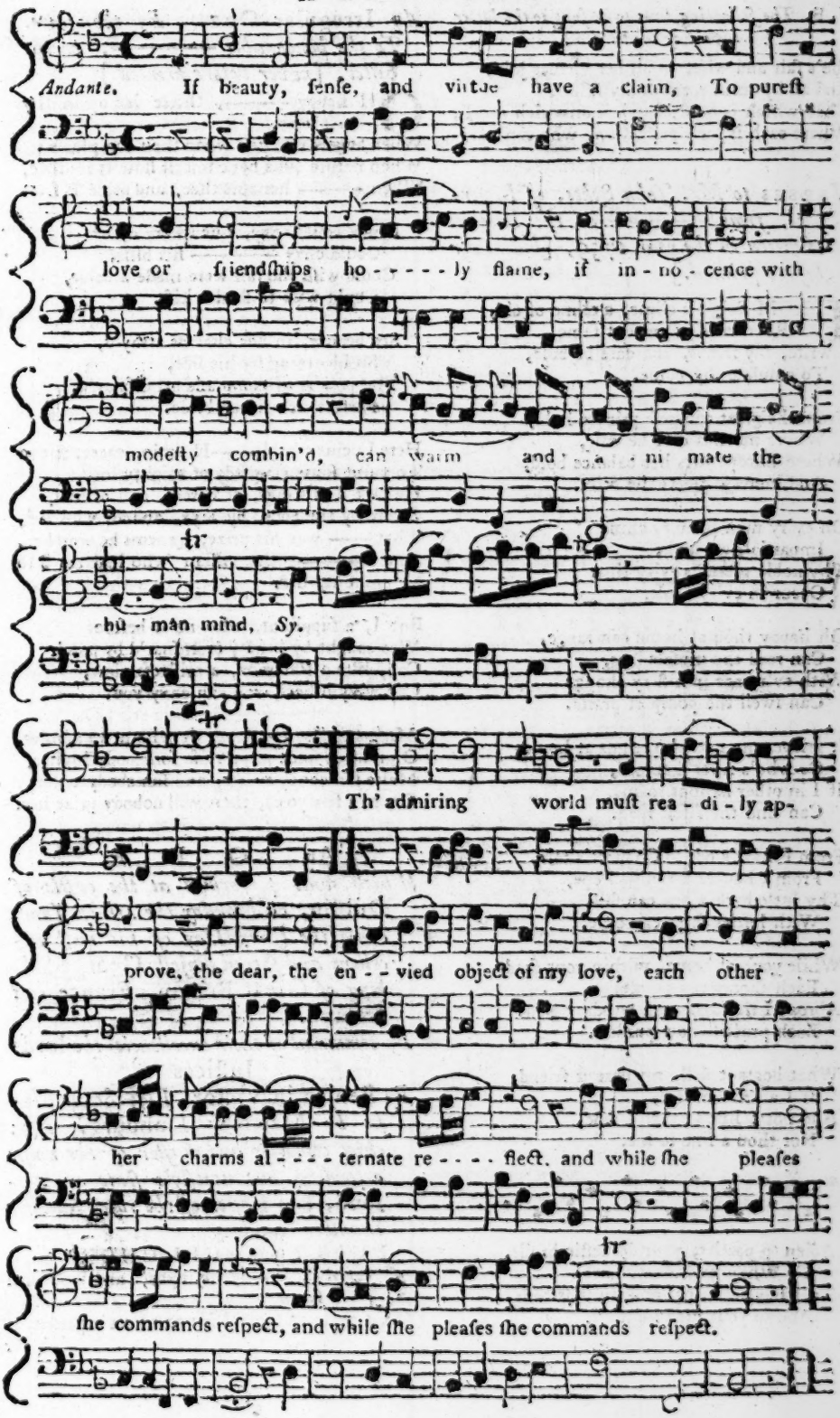
True love unchangeable remains,
First cousin to divine;
All other loves, tho' richly dress'd,
Her beauties far outshine.

XIII.

Therefore, when, Damon, you address
The fair one for a wife,
Let mutual love prepare the way,
To lead an happy life.

THOMAS DE STONTON.

A NEW SONG.


Andante. If beauty, ſenſe, and virtue have a claim, To pureſt
love or friendſhips ho - - - - - ly flame, if in - no - cence with
modeſty combin'd, can warm and a - ni - mate the
hu - man mind, &c.
Th' admiring world muſt rea - di - ly ap-
prove, the dear, the en - - vied object of my love, each other
her charms al - - - - ternate re - - - - flect, and while ſhe pleaſes
ſhe commands reſpect, and while ſhe pleaſes ſhe commands reſpect.

N. B. *The following lines to be ſung to the latter part of the tune.*

She's fair and wiſe, in all her virtues join,
And all by turns reciprocally ſhine;
That which is moſt compleat or which excell,
Where each is ſuch perfection, who can tell?

VERSES *to Mr. John Sykes, of Liverpool, from* ——— *at the Hague. Written in the year* 1759, [*but never before printed.*]

FROM Belgia's clime, a clime of old,
Renown'd in ancient fame,
I write, my friend, and dare be bold,
To emulate thy name.

From the great congreſs princes hold,
Where mortals dare be wiſe,
Where Europe lifts her balance bold,
And homage greets the ſkies.

On ev'ry man in ev'ry clime
Impartiality I look,
Thy noble precepts ev'ry time
Occur in ev'ry book.

Oh happy thou at home can range,
Can read the muſe's lays,
With ev'ry age in hiſt'ry change
Can ſwell the pomp of praiſe.

It grieves me not who reigns at home,
Or who's rever'd abroad,
If I in other nations roam
Can find the ſafeſt road.

From Pindar's ode to Chaucer's tale,
From Chaucer down to Pope,
Thy little bark along can ſail,
With loftier ſhips can cope.

While you, at home, within your ſhade
Each theory can peruſe,
Abroad I through each winding glade
Each practiſe now purſues.

What boots it ſtill, my deareſt friend,
If I all nations ſee,
And not a line to thee I ſend,
Nor thou a line to me.

Adieu to parties, your domeſtic broils,
To Whigs and Torys laws,
To nameleſs things and fruitleſs toils,
And to your *good old cauſe.*

An Irregular ODE. *By the ſame. To the honourable* ———, *on his Siſter,* [*never before printed*]

OH happy ———, thrice happy in thy eaſe,
When angels viſit and when thou can pleaſe;
When nature culls her choiceſt flow'rs for thee,
When ——— honours thee, and pride is free.

I now could envy, Lucius cry'd,
Could envy ——— his bliſs,
Could wiſh the fair were made a bride,
Could wiſh to ſteal a kiſs.

See beauty, in her charms array'd,
Sit blooming by his ſide,
The pow'rs of pomp and art diſplay'd,
Perfection's faireſt bride.

Here Lucius ceas'd.——Hillario, eager, ſtrove
To paint ſome rhapſody of mighty love:
He talk'd of kings, of heroes, and of hell,
Swore by the gods, by Styx, and all who fell,
That —— was his prize, by arms he won her,
And d———d the villian who had dar'd to own her.

But I, a ſuppliant, who ne'er before
Was caught by beauty or enſnar'd by pow'r
Can, like a Palamon, a miſtreſs view,
Can envy others, and can envy you.

Madamaiſelle votre ſœur, is whom we admire,
O grant us ſome pity, raiſe ſomebody higher,
Make ſomebody richer, and ſomebody wiſer,
Or, in a few years, there will nobody prize her.

An ODE,

Which was performed at the caſtle of Dublin, *on Monday the 4th of June, being the Birth-Day of his moſt excellent and ſacred majeſty* George III. *king of* Great Britain, France *and* Ireland.

By command of their excellencies the lords Juſtices.

By Benjamin Victor, *Eſq; Set to Muſic by* Matthew Dubourg, *Eſq; chief compoſer and maſter of the muſic attending his majeſty's ſtate in* Ireland, *and maſter of the royal family's chamber concert.*

DUETT and FULL CHORUS.

COME, lovely nymphs, and youthful ſwains,
That grace and guard HIBERNIA's plains,
Your

Your rural trophies hither bring,
And hail the BIRTH-DAY of your KING!
Da Capo.

A I R.

This happy Day ſhall bleſs the Year!
Now SOL's full glory is diſplay'd!
The ſmile of beauty every vale ſhall wear,
The voice of ſong enliven every ſhade.

AIR with CHORUSES.

I.

" To greet the young monarch of Britain's
bleſt iſle,
" The groves with gay bloſſoms are grac'd!
" The lilly peeps forth an innocent ſmile,
" And roſes croud forward in haſte!

II.

" Diſpatch, gentle Flora! the nymphs of
your train,
" Thro' woodlands, to gather each ſweet;
" Then rob of its treaſures, the dew-ſpangled
plain,
" And ſtrew the gay ſpoils at his feet.

III.

" To a wreath of freſh oak, England's em-
blem of pow'r,
" Whoſe honours, with time ſhall encreaſe,
" Add the olive's freſh ſprig, juſt unfolding
its flow'r,
" Rich tokens of Concord and Peace!

IV.

" Next give him young myrtles, by beauty's
bright queen,
" Collected the pride of the grove!
" How fragrant their odour, their foliage how
green,
" Sweet promiſe of conjugal love.

V.

" But if in your groves, the freſh laurels are
rare,
" Which to your lov'd Monarch belong;
" His Navy and Armies have plenty to ſpare,
" To make him immortal in ſong.

A I R.

Juſtice and valour muſt ſucceed,
And laſting treaſures bring;
Conqueſt and glory are decreed,
The ARMS of BRITAIN's KING!
Da Capo.

DUETT and FULL CHORUS.

Ye lovely nymphs and youthful ſwains,
That grace and guard HIBERNIA's plains;
Your rural trophies hither bring,
And hail the BIRTH-DAY of your KING.

ODE *for his* MAJESTY's BIRTH-DAY, 1764.

Sung at MARYBONE-GARDENS.

CHORUS.

PREPARE, prepare the feſtive ſong,
Let ev'ry Muſe her tribute bring,
Let eccho ſtill the notes prolong,
And ſwell the fame of Britain's king.—

A I R.

In flowing verſe, again renew,
The grateful theme to virtue due.

RECITATIVE.

Scarce yet to manhood, tho' in judgement ripe,
Behold him call'd
To wield a troubled ſceptre, and defend
A throne enthrall'd
In war's tumultuous ſtrife;
The ſofter ſcenes of ſocial life
Behold him ſhun,
And to the calls of ſtate attend;
In glory's full career to run,
Till Peace, from ev'ry eye ſhall wipe
The trickling tear, and war's great work
be done.

A I R.

Round the globe his banners wave,
Laurell'd victory attending,
On his meaſures, wiſe and brave,
Fate and fame alike depending.—

D U E T.

To ev'ry corner of the world,
Is Britain's angry thunder hurl'd;
From ev'ry quarter is the plaintive ſtrain,
Of ſupplicating peace return'd again.

RECITATIVE.

But anxious ſtill for Britain's good,
He waves till fitter terms be given
The proffer'd palm—yet, leſt there ſhoud
(As men too oft repine at Heav'n)
Be any ſubjects in deſpair
Their king ſhould die without an heir
He ſpreads around benigner rays,
And bids the torch of Hymen blaze.——
He ſeeks a princeſs nobly born,
Whom nature's utmoſt gifts adorn,
And bleſs'd with virtues like his own,
To grace and dignify a throne.—

A I R.

Hail! connubial genius! hail!
Ev'ry earthly bliſs ſupplying;
Who of happineſs can fail,
On thy ſteady arm relying:

From thy pure, thy ſacred fire,
Modeſt joys and chaſte deſire,
Sweet content, the balm of woe,
In ſpontaneous circles flow.

Catch the precept from the throne,
Spread round the bright example;
Truth and harmony alone,
Give of Heaveniy joys a ſample.—

The power ſupreme, who worth like their's
approves,
With fruitful bleſſings, crowns their happy
loves.

The

The proſtrate foe again for mercy ſues,
The pitying monarch, with a parent's care
His people's blood to ſpare,——
And deaf to mean ambition's voice,
By nobler zeal inſpired and nobler views,
Thus gave the word, and made mankind rejoice.
War and Tumult now ſhall ceaſe,
And the bleeding world have Peace.

A I R.

Now to dry a nation's tears,
Balmy peace again appears;
Now in ſafety to the gale,
Commerce ſpread her widen'd ſail:
Sing, ye happy Britons, ſing,
Laſt the peace, and live the King.

RECITATIVE.

Advancing now, a fair and ſprightly train—
(Whoſe genial ſmiles the reign of peace adorn)
Fair Science hither leads—nor leads in vain,
(Where plenty pours her overflowing horn,)
For nurs'd in learning's ſacred lore,
A George the ſceptre ſways,
To freedom born the laviſh ſtore
Of free-born arts his arms ſhall raiſe.

A I R.

Here, O Heaven! the fervent prayer,
Long the god-like monarch ſpare;
Still beneath his peaceful ſway,
Long revolve this happy day.

CHORUS.

May we ſtill this happy day,
Many, many years ſurvey,
And, with joy, exulting, ſing,
Laſt the Peace, and live the King.

Concludes with the CORONATION ANTHEM.

GOD SAVE THE KING.

A REBUS.

A Weapon that's us'd in the nation's defence,
An inſect admir'd for its care and good ſenſe,
And what moſt people wiſh for, when age does appear;
Th' initials connected, I'm ſure will declare,
The name of a poet that's careſs'd by the fair.

A REBUS.

A Bird for beauty, and for pride renown'd;
A beaſt in Canady, in numbers found,
A bird that wears a grave majeſtic air,
A beaſt that does his poor inferiors tare,
A bird which ſome king of that ſpecies call;
A monſter which upon the ground does crawl;
A bird much fam'd for mutual love,
An induſtrious inſect that frequents the grove,
A bird whoſe notes, with rapture fills the ear,
An amphibeous creature which a ſhell does wear;
And a beaſt which for lazines none can compare
Collect th' initials and you there will ſee,
What I with all the univerſe to be.

Shooter's Hill.

SIR,

THE following was found in a drawer amongſt ſome old writings, belonging to an old lady, I dare ſay they have not been in print, I ſhould, therefore, be glad to ſee them in your Magazine, as it will amuſe ſeveral of your readers, and, perhaps, ſome of your ingenius correſpondents, may be ſo obliging as to ſend a ſolution in verſe.

I am, Sir, your obliged
humble ſervant,

Lincoln, June 12, 1764. JOHN CLARKE.

The Ladies Library.

1 A retreat for wild beaſts where no rain comes.
2 Put a warlike inſtrument into a tremour.
3 The head of a conſiſtory.
4 The motion of an arrow out of a bow.
5 What lays on the floor, and the firſt.
6 What equals are upon, and the Grecian beauty.
7 A child of two months old.
8 A command to a waterman.
9 The leg of a ſwine ſeaſon'd and old kept.
10 The effects of a wound.

Miſcellanys.

11 A large caſk not us'd.
12 The reviewers of the univerſe.
13 The conſequence of a bliſtering plaiſter.
14 The ſecurity for a cabinet.
15 An edifice dedicated to the deity.
16 The Goſſips.
17 A thing belonging to the grand Signior's demeſnes much given to prying.
18 A blow at the door of a publick houſe.
19 The knave of clubs, and a high note in muſick.
20 A ſervant out of livery.
21 The protectors of minors.

Divinity.

22 A ſubterraneous habitation.
23 What a ſhower of rain always does.
24 What flint and ſteel produce.
25 A ſtate priſon, and a father's care.
26 A copper veſſel and a ſpring confin'd.
27 Nothing but ſable.
28 An inſtrument for the hair juſt purchas'd.
29 The place where tradeſmen keep their money, and Abraham's nephew.

A

*** *Several of the favours which we have received from our obliging correſpondents have been unavoidably poſtponed this month, on account of the great quantity of matter which we have inſerted for their entertainment.*

Agreeable to Mr. Buddle's requeſt, we have inſerted his deſcription of the Coal-Waggon, and likewiſe engraved a plate from his drawing; but at the ſame time, we cannot help ſaying that our conſtant readineſs to oblige our correſpondents as far as poſſible, has, in this inſtance, ſurprized us into what we muſt at leaſt call a miſtake: for we have ſince found that a deſcription with a plate in ſome meaſure like that which Mr. Buddle ſent us, has already appeared in one of the magazines a few months ago. Conſequently this matter will not appear ſo new to ſome part of the public as we could have wiſhed. Therefore we muſt take this opportunity of deſiring our correſpondents would for the future favour us with only ORIGINALS.

A CANDID REVIEW *of* NEW BOOKS.

ART. 1. Experimental *eſſays. By David Macbride, Surgeon. 8vo. Millar. Price 4s. ſewed.* *See page 264.*

ART 2. *A ſpecimen of ancient Welſh poetry. Tranſlated by the Rev. Mr. Evan Evans. 4to. Dodſley. 4s. Sewed.* *See page 266.*

ART. 3. *Farewel. A poem. By Mr. Churchill. 4to. Flexney. 2s. 6d.*

This poem is a dialogue between the poet and his friend. The former has determined upon going to india, with which the latter is greatly ſurprized, and expoſtulates with him upon ſuch a ſudden reſolution, ſaying, that if *Satire* be his aim, he need not go to India; there are knaves and fools enough at home. The poet acknowledges this, yet ſays,

———Be England what ſhe will
With all her faults ſhe is my *country* ſtill.

To which his friend replies,

Thy *country*? and what then? is that mere word
Againſt the voice of reaſon to be heard?

And after calling the love of his county mere prejudice, he ſays it is the part of great ſouls to "conſider every country as their own." The poet thinks not ſo, and ſays,

To deem of every country as the ſame
Is rank rebellion 'gainſt the lawful claim
Of nature, and ſuch dull indifference
May be philoſophy, but can't be ſenſe.

His friend anſwers,

Weak and unjuſt diſtinction, ſtrange deſign,
Moſt peeviſh, moſt perverſe, to undermine
Philoſophy, and throw her empire down
By means of *Senſe*, from whom ſhe holds her crown.
Divine *Philoſophy*, to thee we owe
All that is worth poſſeſſing here below;
Virtue and wiſdom conſecrate thy reign,
Doubled each joy, and pain no longer pain.

Poet. Had ſhe, content within her proper ſphere,
Taught leſſons ſuited to the human ear,
Which might fair virtue's genuine fruits produce,
Made not for ornament, but real uſe,
The heart of man unrival'd ſhe had ſway'd;
Prais'd by the good, and by the bad obey'd.
But when ſhe, overturning reaſon's throne,
Strove proudly in its place to plant her own,
When ſhe with apathy the breaſt would ſteel,
And teach us deeply feeling, not to feel,
When ſhe would wildly all her force employ,
Not to correct our paſſions, but deſtroy,
When, not content our nature to reſtore,
As made by God, ſhe made it all new o'er,
When, with a ſtrange and criminal exceſs,
To make us more than men, ſhe made us leſs,
The good her dwindled pow'r with pity ſaw,
The bad with joy, and none but fools with awe.
Truth, with a ſimple and unvarniſhed tale,
E'en from the mouth of N— might prevail,
Could ſhe get there, but falſhood's ſugar'd ſtrain
Should pour her fatal blandiſhments in vain,
Nor make one convert, tho' the ſyren hung,
Where ſhe too often hangs, on M— tongue.
Should all the Sophs, whom in his courſe the ſun
Hath ſeen, or paſt or preſent, riſe in one,
Should he, whilſt pleaſure in each ſentence flows
Like Plato, give us poetry in proſe,
Should he, full orator, at once impart
Th'Athenian's genius, with the Roman's art,
Genius and art ſhould in this inſtance fail,
Nor Rome tho' join'd with Athens here prevail.
'Tis not in man, 'tis not in more than man
To make me find one fault in nature's plan.
Plac'd low ourſelves, we cenſure thoſe above,
And, wanting judgment, think that ſhe wants love,

Blame,

Blame, where we ought in reaſon to com-
commend,
And think her moſt a foe, when moſt a friend.
Such be Philoſophers—their ſpecious art,
Tho' friendſhip pleads, ſhall never warp
my heart;
Ne'er make me from this breaſt one paſſion
tear
Which nature, my beſt friend, hath planted
there.
Friend.] If you prefer the place where
you was born,
And hold all others in contempt and ſcorn
On fair compariſon; if on that land
With lib'ral, and a more than equal hand
Her gifts, as in profuſion, plenty ſends;
If virtue meets with more and better friends;
If ſcience finds a patron 'mongſt the great;
If honeſty is miniſter of ſtate;
If pow'r, the guardian of our rights deſign'd,
Is to that great, that only end confin'd;
If riches are employ'd to bleſs the poor;
If law is ſacred, liberty ſecure;
Let but theſe facts depend on proofs of
weight,
Reaſon declares, thy love can't be too great,
And, in this light could he our country
view,
A very Hottentot muſt love it too.
But if, by fate's decrees, you owe your
birth
To ſome moſt barren and penurious earth,
Where, ev'ry comfort of this life denied,
Her real wants are ſcantily ſupplied,
Where pow'r is reaſon, liberty a joke,
Laws never made, or made but to be broke,
To fix thy love on ſuch a wretched ſpot
Becauſe, in luſt's wild fever, there begot,
Becauſe, thy weight no longer fit to bear,
By chance not choice, thy mother dropt thee
there,
Is folly, which admits not of defence;
It can't be nature, for it is not ſenſe.
By the ſame argument which here you hold,
(When falſhood's inſolent, let truth be bold)
If propagation can in torments dwell,
A devil muſt, if born there, love his hell.
Poet.] Had fate, to whoſe decrees I low-
ly bend,
And e'en in puniſhment confeſs a friend,
Ordain'd my birth in ſome place yet un-
tried,
On purpoſe made to mortify my pride,
Where the ſun never gave one glimpſe of
day,
Where ſcience never yet could dart one ray,
Had I been born on ſome bleak, blaſted plain
Of barren Scotland, in a *Stuart*'s reign,
Or in ſome kingdom, where men, weak or
worſe,
Turn'd nature's ev'ry bleſſing to a curſe,
Where crowns of freedom, by the fathers
won,
Dropp'd leaf by leaf from each degen'rate
ſon,
In ſpite of all the wiſdom you diſplay,
All you have ſaid, and yet may have to ſay,
My weakneſs here, if weakneſs, I confeſs,
I, as my country, had not lov'd her leſs.

The poet goes on, and ſtrongly marks ſome tranſactions which have lately happened in London, draws a character with great freedom, and concludes with his intention of going to India.

ART. 4. *Proceedings of a general court-martial for the trial of a charge preferred by Colin Campbell, Eſq; againſt major general Monckton.* 1s. *Robſon.* *See page* 274.

ART. 5. *The Modern Practice of the London hoſpitals,* 12*mo. Coote.* 3s.

This book contains exact copies of the receipts, and a particular account of the different methods of cure, at St. Bartholomew's, St. Thomas's, St. George's, and Guy's hoſpitals, and will doubtleſs be found very uſeful to country apothecaries, and private families. At the beginning is prefixed the following TABLE OF DIET, which is obſerved at the above hoſpitals.

FULL DIET.

Sunday and Thurſday.

Breakfaſt. A pint of water-gruel.
Dinner. Half a pound of boiled beef with greens.
Supper. A pint of broth.

Tueſday and Saturday.

Breakfaſt. A pint of water-gruel.
Dinner. Half a pound of boiled mutton with greens.
Supper. A pint of broth.

Monday.

Breakfaſt. A pint of milk-pottage.
Dinner. A pint of rice milk.
Supper. Two ounces of cheeſe or butter.

Wedneſday.

Breakfaſt. A pint of milk pottage.
Dinner. Half a pound of boiled pudding.
Supper. A pint of water-gruel.

Friday.

Breakfaſt. A pint of milk-pottage.
Dinner. A pint of plumb-broth.
Supper. Two ounces of cheeſe or butter.

The patients upon full diet ſhall have one loaf of bread per day.

Three pints of ſmall beer per day from Lady-day to Michaelmas.

One quart per day from Michaelmas to Lady-day.

N. B. The loaf of bread weighs fourteen ounces.

LOW

LOW DIET.

Sunday.

Breakfaſt. A pint of water-gruel.
Dinner. Two ounces of roaſted veal, with a ſlice of bread-pudding.
Supper. A pint of broth.

Tueſday and Saturday.

Breakfaſt. A pint of water-gruel.
Dinner. Two ounces of boiled mutton with greens and a pint of broth.
Supper. A pint of broth.

Monday.

Breakfaſt. A pint of milk pottage.
Dinner. A pint of rice milk.
Supper. Two ounces of cheeſe or butter.

Wedneſday.

Breakfaſt. A pint of milk-pottage.
Dinner. A ſlice of boiled pudding.
Supper. A pint of water-gruel.

Thurſday.

Breakfaſt. A pint of water-gruel.
Dinner. Two ounces of roaſted veal, and a pint of rice milk.
Supper. A pint of broth.

Friday.

Breakfaſt. A pint of milk-pottage.
Dinner. A pint of plumb broth.
Supper. Two ounces of cheeſe or butter.

The patients upon low diet ſhall have one loaf of bread per day.

One quart of per day beer from Lady-day to Michaelmas.

One pint per day from Michaelmas to Lady-day.

MILK DIET.

Sunday, Tueſday, Thurſday, and Saturday.
Breakfaſt. A pint of milk-pottage, or water-gruel.
Dinner. A pint of plumb pottage, and four ounces of bread pudding.
Supper. A pint of milk-pottage, or water-gruel.

Monday, Wedneſday, and Friday.

Breakfaſt. A pint of milk-pottage, or water-gruel.
Dinner. A pint of rice-milk.
Supper. A pint of milk-pottage, or water-gruel.

The patients upon milk diet ſhall have one loaf of bread per day.

Three pints of drink per day, one pint whereof ſhall be milk and two water.

The patients upon fiſh diet ſhall have fiſh for dinner on Mondays, Wedneſdays, and Fridays, if it can conveniently be had; if not, the low diet.

The patients upon dry diet ſhall have two ounces of butter, or cheeſe, for breakfaſt, and the ſame for ſupper, every day in the week; and the low diet for dinner, but without broth or rice.

Milk on Tueſdays, Thurſdays, and Saturdays. Bread and beer as thoſe upon low diet.

The patients upon raiſin diet ſhall have half a pound of rainſins per day; as much bread as they can eat, a quart of decoct. Guaic. Fort. and as much of the decoct. Guaic. Tenue, as they can drink.

The patients under ſalivation ſhall have one quart of milk per day, and half a pound of mutton to be boiled for broth.

ART. 6. *The Oxford Sauſage: Or ſelect poetical pieces, written by the moſt celebrated wits of Oxford. Adorned with cuts.* 8vo. *Fletcher.* 2s.

The editor informs us, in a preface (which is not void of dullneſs and conceit), that moſt of theſe pieces have appeared before, and are now collected together in order to preſerve them from oblivion. Collections of fugitive pieces of merit are certainly deſerving of public eſteem and encouragement. As to the collection before us, it may be doubted whether ſome of them were worthy of being printed a ſecond time; on the contrary, there are others which are far from being deſtitute of merit, though they are, in general, calculated for the meridian of Oxford. Moſt, if not all, the ſelect pieces, have been, at different times, printed in the news-papers and magazines.

ART. 7. *The riſe, and ſurprizing adventures of Donald M'Gregor. Williams.* 2 *vols.* 4s.

Thoſe who have conceived an antipathy to the Scots will read ſome parts of this novel with pleaſure; but thoſe who are fond of the Scots will utterly condemn it.

ART. 8. *An Anſwer to the Budget. Sumpter.* 4to. 1s.

Whether this anſwer comes from the miniſtry, we cannot take upon us to ſay; but as it is the only one that has appeared, we ſhall, having given our readers an extract from the Budget in our laſt, give them another from the anſwer, and leave them to judge of the merit by the following ſpecimen: we will only obſerve, that the manner in which this writer refutes the facts advanced in the Budget, is in the lump, by ſaying, *they are falſe.*

"His criticiſm on the eſtabliſhment of the army deſerves no other notice than, that it is a parcel of nonſenſe, utterly unintelligible and falſe in the only fact that is pretended to be advanced; which is, that the adminiſtration have concluded a peace that is *hollow, and unlikely to be permanent.*

There is not a man in the three kingdoms but that can, if he pleaſes, give the lie to this aſſertion. It is now above a year and a half ſince the peace was concluded; and has any one circumſtance occurred to prove the peace hollow? The writer of the Budget cannot bring one. And the very friendly correſpondence, and good underſtanding at this time ſubſiſting between the courts of France and England, is a ſtronger proof of the peace being likely to be *permanent*, than any thing the writer of the Budget can bring to the contrary.

The ſtrict union, cordiality, and affection, between the courts and the ambaſſadors alſo, is *another* proof that there is no reaſon to ſuſpect the peace is not permanent, whatever artful, baſe, deſigning men may report. Under the ſame head, the writer talks of an over-proportion of officers. I agree with him in the expreſſion, though not in the argument in which he uſes it, becauſe nothing can be more malicious and falſe than that argument is. It is true, that there is "an over-proportion of ſome officers;" factious officers, I mean, who, thinking themſelves wholly independent, preſume to oppoſe the government of their maſter, from whom they receive their daily bread. Two of theſe his M———y, with a ſpirit becoming a great K——, *who will think and act for himſelf*, has thought proper to diſmiſs. Upon the diſmiſſion of the firſt, he being a member of parliament, a parliamentary enquiry was threatened to be made into the cauſe of his diſmiſſion: but upon ſecond thoughts, the minority thought better of it; they were in no humour to hazard a trial of ſtrength upon a queſtion, which one ſingle aſſertion is at any time ſufficient to put a negative upon. It was his M————y's pleaſure, that that officer ſhould be diſmiſſed his ſervice; and who has a right to demand more? who is to controul m——— in the exerciſe of the royal prerogative? As to the diſmiſſion of the other officer, although it is no more than a thing of courſe, and what every body might have expected; yet the writers of the minority have pompouſly repreſented it as an invaſion of national liberty, as an attack upon the conſtitution, forgetting, or rather wilfully neglecting, to ſtate even any part of that conduct before the public, which cauſed the diſmiſſion. I ſay cauſed; for, to the honour of the adminiſtration, they act with more openneſs and ſpirit, than their predeceſſors, who, if an officer diſobliged them by his conduct in parliament, they were mean enough, and pitiful enough, to ſeek for another flaw in his conduct, and pretend to make that the cauſe of his diſmiſſion, which certainly followed upon the firſt moment of ſuch diſcovery.

The writers for the preſent adminiſtration, with a ſpirit truly becoming Engliſhmen, of whom openneſs is the characteriſtic, do not lurk in bye corners to watch for little advantages, but publickly and honeſtly acknowledge, that the diſmiſſion of this latter officer was for his oppoſition to the miniſtry. And I would aſk his friends, who know what he ſaid upon a certain occaſion, whether they expected he would be permitted to hold all, or any of his employments, one day longer than the prorogation of parliament? Whether, after having, as it were, given fire to a motion intended to aſperſe and diſtreſs his Ma———'s government, that government could think themſelves ſafe, if they did not puniſh, in an exemplary manner, ſuch wanton and barefaced violence? Whether former miniſters have not done the ſame with reſpect to ſuch officers as voted againſt them in parliament, although they have not had the courage to acknowledge, that ſuch voting was the real cauſe of their diſmiſſion? Whether the miniſter, when in parliament he is endeavouring to execute in the moſt eaſy, ſecure and ſatisfactory manner, his M——'s Buſineſs, has not, and ought not, to have the ſame reaſon to expect, that all the officers who ſit in that aſſembly, ſhould vote with him upon all occaſions, they being ſtill his M———'s ſervants, as lord Granby, when in the field, expects that all the officers under him ſhould obey his orders directly, and without any kind of murmur or heſitation; and if any does not, he does not puniſh or complain of ſuch as preſume to diſobey, as preſume to know better than their leader? Would not that miniſter deſerve to be branded as a tame, cowardly wretch, that had not ſpirit to adviſe the chaſtiſement of ſuch factious oppoſition? And would not that S————n be in a moſt miſerable, unhappy, and diſtracted ſituation, that durſt not, that would be afraid to revenge ſuch an inſult offered to his goverment, by only a due exertion of his prerogative?————Thank God, we have at length a K———, who knows how to be a K———, and who, in order to make himſelf and his people happy, acts with a ſoul that is truly noble, virtuous and great, and worthy of himſelf.

ART. 9. *A ſecond letter to the common council of the city of London, with remarks on lord chief juſtice Pratt's letter to Sir Thomas Harriſon. Nicoll.* 8*vo.* 1*s.*

Defends the miniſtry, abuſes lord chief juſtice Pratt and the common council of the city of London. This advocate for the adminiſtration

miniſtration is greatly offended with his lordſhip for calling himſelf *an honeſt man*, and likewiſe with his lordſhip's having been honoured with the freedom of the city, and the approbation of his fellow ſubjects.

ART. 10. *The life of William the Conqueror. By Andrew Henderſon.* 3*s. bound.*

ART. 11. *Two letters from a late diſſenting teacher; with an anſwer to the former, and animadverſions on the latter. By Thomas Foſter, rector of Haleſworth.* 8*vo.* 2*s.* 6*d. ſewed. Bathurſt.*

ART. 12. *A ſermon preached at the Engliſh church at Rotterdam. By Thomas Greaves.* 6*d. Field.*

ART. 13. *An interpretation of the Old Teſtament. Vol.* I. *containing a paraphraſe of Geneſis. By Thomas Spooner.* 8*vo.* 5*s. bound. Dilly.*

ART. 14. *An Eſſay on temporal affection. In a letter to a noble lord.* 6*d. Wilſon and Fell.*

ART. 15. *A ſermon before the governors of the Small Pox Hoſpital. By Philip, lord biſhop of Norwich.* 6*d. Woodfall.*

ART. 16. *A ſovereign remedy for the cure of hypocriſy. Addreſſed to the Methodiſts. By an enemy to pious fraud.* 1*s. Becket.*

ART. 17. *An anſwer to a book, entitled, An appeal to the common ſenſe of all chriſtian people.* 2*s.* 6*d. ſewed. Whiſton.*

ART. 18. *Spiritual Courtſhip, or the rival quakereſſes. By William Stewardſon.* 1*s. Williams.*

ART. 19. *A letter from the elephant to the people of England.* 4*to. Sumpter.* 1*s.*

A wretched account of the travels of an elephant, who has ſeen ſeveral parts of the world, and is come to England.

A new Deſcription of the Vatican is publiſhing at Rome, which is to be comprized in two volumes 8vo. The firſt has already appeared, and contains an account of the *Baſilic of St. Peter*, of the various principles, rules, and orders of Architecture that are obſerved in that ſublime and majeſtic ſtructure, and a circumſtantial deſcription of the paintings and ſtatues with which it is adorned. There is in this firſt volume a particular account of the famous *dome* or *cupola*, of that noble edifice, which ſome years ago leaned to one ſide, and ſeemed almoſt ready to fall. This defect, which has been well repaired, was conſidered, by ſome, as owing to the void ſpace, occaſioned by the ſtair-caſes made by the cavalier *Bernini*, in the great Pilaſters that ſupport the dome: But it has been demonſtrated, that the preſſure of the cupola againſt its counter-forts, has been the only occaſion of the defect in queſtion. There are three learned diſſertations publiſhed on this ſubject, by the fathers *Jacquier*, *La Sueur*, and *Boſcowich*, who may be juſtly reckoned among the moſt eminent mathematicians of this age.

There is alſo in the preſs a new *Treatiſe ou Muſick*, ſuppoſed to be the production of the famous *Tartini*. This author maintains, that the perfection of muſic depends upon a thorough knowledge of *Diatonics*, which have not been explained in any treatiſe on muſick, either ancient or modern: and that the imperfection of modern muſick is owing to the myſtery the *Greeks* made of the *Diatonic Science*, which was their invention. Signior *Tartini* thinks he has unfolded this miſtery: His Treatiſe indeed, though the ſtyle be neither elegant nor perſpicuous, is learned and ingenious; it contains ſeveral new ideas, which may contribute much to the perfection of harmony, and throw a remarkable light on the muſick of the ancient *Greeks*.

A CHRONOLOGICAL MEMOIR *of* OCCURRENCES, *For* JUNE, 1764.

FOREIGN AFFAIRS.

RUSSIA.

Peterſbourg, June 12. THE treaty concluded here between the empreſs of Ruſſia and the king of Pruſſia, on the 11th of April, is in ſubſtance as follows:

By articles 1 and 2. a treaty of defenſive alliance, and a mutual guaranty, are agreed to, after reſerving the liberty of concluding other treaties not contrary to the preſent.

3—9. In caſe of a foreign attack, 10,000 infantry and 2000 cavalry are promiſed, three months after the firſt requiſition, to be continued till a ceſſation of hoſtilities. If theſe are not ſufficient, means to be concerted to employ additional forces. The troops to be paid and furniſhed with ammunition by the party aſſiſting: proviſions and quarters to be furniſhed by the aſſiſted. The troops to receive orders from their own general; and to have their own religion and laws.

10. No peace, &c. to be concluded without mutual conſent.

11. In caſe of war on the part of the aſſiſting party, it ſhall be exempted from furniſhing its quota, or ſhall be at liberty to withdraw its forces, after two months notice.

12. A free commerce between the two ſtates.

13, 14. The treaty to be in force eight years, and renewable before the expiration, according to circumſtances. Ratifications to be exchanged in ſix weeks.

By a ſecret article it is engaged to maintain Poland in its right of a free election, and to prevent all hereditary ſucceſſion.

POLAND. *Dantzick, May* 16. Poland is now divided into three parties, and there is great room to fear the election of a new king will not paſs without bloodſhed. The three parties are, that of the great-general of the crown, that of count Poniatowſky, and that of the neuters. The firſt may be called the party of Saxony, which is very powerful, having at its head a man of great abilities, who will probably be ſupported by the crown troops; and he talks of holding another diet in oppoſition to that which has been ſitting ſince the 7th of this month at Warſaw. As to the ſecond party, count Poniatowſky's, he has the Ruſſians on his ſide, and all the intereſt of the Czartorinſky family. The third, called Neuters, do not make ſo much noiſe at preſent, as the two others; but according to appearance, that party will have its day, and ſooner or later the ballance may turn on which ever ſide they take, when they ſee a proper moment.

GERMANY. The whole town of Freyſtadt, except five houſes, in the principality of Glogau, in Sileſia, was burnt down on the 6th of May, together with the ſuburb of Glogau, ſome exterior works, and about thirty houſes in the adjoining village of Nieder-Siegerſdorff. The wind blew with great violence, and the flames ſpread ſo faſt, that the poor inhabitants had not time to ſave any thing.

Liegſtadt, June 3. Yeſterday in the evening, between five and ſix o'clock, a moſt dreadful accident threw this town in the greateſt conſternation and diſtreſs: one of the magazines left here by the Engliſh, filled with great ſtore of ammunition and powder, ſituated near the ſouth gate behind St. Jacob's church, blew up; which hath occaſioned the loſs of many lives of men, women, and children, beſides numbers of others greatly wounded and hurt. It entirely deſtroyed the adjacent churches and houſes, and greatly damaged ſuch as were at ſome diſtance off. The loſs on this occaſion is no more to be deſcribed than are the apprehenſions of the like diſmal accidents.

Strelitz, June 5. Colonel David Græme and Stephen Martin Leake, Eſq; garter principal king at arms, plenipotentiaries for inveſting his ſerene highneſs the duke of Mecklenburgh Strelitz, with the habit and enſigns of the moſt noble order of the garter, arrived here the 29th of May. The ſame evening they had an audience of the duke, and preſented their credentials with the book of ſtatutes; and his ſerene highneſs declaring his acceptance of the order, under the uſual reſervations as a prince of the empire, the plenipotentiaries immediately inveſted him with the Garter, Ribband, and George, garter king of arms pronouncing the uſual admonitions in Latin; and afterwards delivered the ſtars and ribband.

The 4th of June, the king of Great-Britain's birth-day, being appointed by his ſerene highneſs for the public inveſture, the plenipotentiaries were conducted to court in the duke's coaches, and with the accuſtomed ceremonies, to the chamber of audience, where the enſigns had been previouſly laid upon a table. Soon after his ſerene highneſs came in, and the plenipotentiaries taking off his ribband, with the george, and his coat, they put on the ſurcoat and ſword of the order, garter taking the duke's ſword and his fee, and wearing it (according to cuſtom) during the reſt of the ceremony.

The habit and enſigns were then delivered to the perſons appointed to carry them, and a proceſſion was made to the great hall, where two canopies were erected of crimſon damaſk laced with gold, one at the upper end of the ſovereign's ſtate, and the other on the left ſide for the duke, with a chair on either ſide for the two plenipotentiaries, a table being placed near the ſovereign's ſtate, to lay the habit and enſigns upon.

During the ceremony the guns were fired three times; 1ſt, at the duke's entrance into the hall; 2d, when he was inveſted with the cap; and, laſtly, when the ſtiles were proclaimed. In the evening there was a ball. *Lond. Gaz.*

FRANCE.

FRANCE. *Paris, June* 8. On the 4th the king in council examined the affair of the widow Calas, her children, and the ſieur la Vayſſe, and annulled the ſentences of the Capitouls and the parliament of Toulouſe againſt the unfortunate John Calas. It's ſaid, that the parliament of Grenoble is charged with the reviſion of this buſineſs.

ITALY. *Venice, May* 30. His royal highneſs the duke of York entered the Venetian ſtate, from Mantua, on Friday the 25th inſt. and was eſcorted from the frontiers by detachments of light Dalmatian cavalry to Verona. His royal highneſs having before ſignified his intention of not making any ſtay there, prevented the exhibition of a bull-feaſt, prepared to be made in the Roman ampitheatre; which was ſaid to have been lighted by many thouſand torches, and filled with people: it will contain 22,500. The podeſta, M. Cornero, waited upon his royal highneſs at his inn, to compliment him upon his arrival; and the next morning early his royal highneſs purſued his journey for Venice, eſcorted again by detachments of Dalmatian cavalry. As his royal highneſs only got out of his coach to ſee the olympic theatre at Vicenza, the podeſta ſent a deputy to compliment him at the coach-door. From thence his royal highneſs proceeded to Padua, where he dined, and was complimented by the proveditor, M. Vendramin, attended by the principal nobility of that place; and the ſame evening proceeded to Venice, where he arrived in perfect health. The next morning his royal highneſs received the compliments of four Venetian noblemen, Giovanni Grimani, Franceſno Peſaro, Vettor Piſani, and Marco Priuli; who had been appointed by the doge, as deputies to attend him during his ſtay here. In the evening his royal highneſs went to a very large box, richly furniſhed for his reception, to ſee the opera of Caius Marius repreſented in the great theatre of St. John Chryſoſtom's, and was attended there by the deputies; as he was alſo the following night in a box finely fitted up to ſee the opera of Sophoniſba in the theatre of St. Luke's. Yeſterday his royal highneſs, attended by the deputies, and a great number of Engliſh noblemen and gentlemen, went to ſee the arſenal, where many of the Venetian nobility of both ſexes were aſſembled to pay their reſpects to him. He was conducted to the different parts in a fine felucca, built on purpoſe, and rowed by men dreſſed in the Engliſh manner: there were three other feluccas rowed by men all dreſſed like Engliſh ſailors, which were filled with Engliſh and other foreigners of diſtinction, and with noble Venetians of both ſexes. Three thouſand hands were employed in building and fitting out ſhips and galleys. His royal highneſs viſited the ropewalk, where they were making cables for an eighty gun ſhip, and ſaw in other places the forging of anchors, and caſting of a cannon for forty pound balls; was ſhewn the different ſtores, and conducted into the great armory, where there was a rinfreſco and a concert of muſic, and from the balcony ſaw the ſhews called le Forze d'Ercole and the Moreſca dance. His royal highneſs went on board the Bucentoro, and afterwards ſaw it launched. While his royal highneſs was in the arſenal, they began to build a large galley, which he ſaw in great forwardneſs.

Venice, June 8. On Wedneſday the 30th paſt, the magiſtrates of the Razon Vecchia ſent his royal highneſs the compliment uſually made to foreign princes here, of a large ſervice of glaſs for a deſert, and of wax in a variety of forms of birds, fruits, flowers, &c. to which was added, a bureau of very extraordinary workmanſhip. On Aſcenſion-day his royal highneſs went to the palace to ſee the banquet, prepared for the doge and the ſigniora; and was afterwards conducted in a fine barge and entertained by the noble deputies at Murano at dinner; to which all the Engliſh of diſtinction, and many Venetian noblemen and ladies, were invited. In the afternoon his royal highneſs took the diverſion in the barge upon the water, where there was a very great concourſe of people of diſtinction in gondolas and other barges. On Sunday laſt his royal highneſs was conducted by the deputies in a fine barge, to ſee the ceremony of the doge's going in the bucentoro, and attended by a great number of the nobles, to eſpouſe the adriatick ſea. This ſolemnity is always performed upon Aſcenſion-day, when the weather permits. In the evening his royal highneſs was pleaſed to go to the hoſpital of the Mendicanti, and was entertained there with a concert of vocal and inſtrumental muſick, performed by the girls of that hoſpital.

The four noble deputies appointed to attend his royal highneſs, animated with an earneſt deſire to anſwer the intention of their republick, in teſtifying to his royal highneſs their extreme ſatisfaction in the honourable deputation conferred upon them, rivalled each other in contriving various entertainments for rendering his royal highneſs's ſtay in Venice agreeable: that of a publick Regatta upon the Great Canal was the moſt extraordinary; and the forming of it, however difficult on account of the ſhortneſs of the time, limited to eighteen days only, for making the great preparation, did not deter them from the undertaking; and the execu-

tion

tion of it excited univerſal admiration and applauſe. They fixed the Regatta to the 4th of June, for celebrating with the greateſt pomp, in preſence of his royal highneſs, the anniverſary of his Britannick Majeſty's birthday. In the morning all the Engliſh noblemen and gentlemen went to the houſe of Mr. Murray, his Britannick Majeſty's Reſident, who had the honour to attend, and congratulate his royal highneſs upon ſo joyful an occaſion; and all had the honour to dine with his royal highneſs; and the four noble deputies, and ſome foreigners of diſtinction were likewiſe invited.

The numerous and ſplendid barges ſet out from the lower end of the great canal a little before three o'clock, and advancing towards the Realto Bridge before the palace of his royal highneſs, who then went attended, in a Biſſona, by his excellency M. Grimani, the eldeſt of the noble deputies, formed a pompous ſuite to his royal highneſs, to the number of nine magnificent Peota's, ten fine Biſſonas, ſeven Margarottas, and one Ballotina; following the courſe of the great canal, his royal highneſs arrived at the place called the Mount of St. Anthony, where the ſignal being given, many competitors, in a boat with one oar ſtarted: his royal highneſs ſaw in the Biſſona the whole of that race, which paſſing along the great canal, and returning back to the middle of it, formed a courſe of about four miles, and ended at a conſpicuous ſtructure, erected upon barges, and repreſenting the palace of joy; in the front of the firſt ſtory of which appeared Venice embracing Britannia. The firſt race being over, his royal highneſs was pleaſed to go to a palace upon the Great Canal, which was fitted up, and adorned on purpoſe by the noble deputies, to receive and entertain him occaſionally, where, from a balcony, ſurrounded by a number of ladies and gentlemen, while a plentiful and elegant Rinfreſco was ſerved, his royal highneſs was ſpectator of the four ſubſequent Regattas, or Races.

In the mean time, in ſight of above two hundred thouſand ſpectators, the nine magnificent expenſive Peotas moved ſlowly about the canal amidſt ſeveral thouſand Gondolas and other light barges; while the ſwift and equally rich Biſſonas and Margorottas, with young nobles, relations and friends of the deputies, attended, armed with a bow and pellets, and cleared the way for the racers.

The four firſt Peotas repreſented the four elements; the firſt of them, entirely ſilvered over, and ſymbolizing the element of water, repreſented the triumph of Neptune, adorned with figures of tritons, ſword-fiſh, dolphins, &c. The ſecond expreſſed the earth, ſymbolized in the goddeſs Cybele, crowned with towers, and adorned with various products, plants, flowers, and animals, the whole being gilt and ſilvered over. The third was ſky-colour and ſilver, denoting the element of air, expreſſed by the rape of Orithya by Boreas, with Zephirs and Cupids playing around in the air. The fourth was of a flame-colour, with ornaments of ſilver, indicating the element of fire, admirably expreſſed by the forge of Vulcan, ſweating at the anvil, with his naked cyclops in gigantick figures, with Venus oppoſite, in her car drawn by doves, and with other alluſions agreeable to the fable. Theſe four peotas bore the arms quartered of the four noble deputies. The other five peotas were fitted out by their neareſt relations. The firſt repreſented Great Britian led in triumph by Europa; the ſecond ſhewed the whale-fiſhing very well executed; the third exhibited the triumph of Venus, in her car drawn by four doves; the fourth, the chariot of the ſun, drawn by four horſes, preceded by Aurora in the act of diſperſing night; the 5th and laſt, the triumph of Pallas, with trophies and alluſions to that deity, &c. All rivalling each other in pomp, and glittering with ſilver and gold, particularly the various elegant dreſſes of the rowers, muſicians, and other figures, in each peota, richly adorned with laces, beſides the long fringes and taſſels of ſilver playing upon the water. The ſingularity of the ſhew, poſſible to be executed only in Venice, in regard to its ſituation and conſtruction, animated the four noble deputies to contrive and exhibit, in ſo ſhort a time, without reflecting at all, upon the greatneſs of an undertaking that ſeemed to exceed the limits of a private ſtation. Their ſole view was to render his royal highneſs's ſtay in Venice as agreeable as they poſſible could, and to manifeſt at once to the whole world, the ſincere friendſhip of the republic towards the crown of Great Britain.

The Biſſonas were barges with eight oars; the Margorottas with ſix, and the Ballotinas had four. Both barges and rowers were dreſſed in a moſt elegant taſte, and were as fine as ſilk, gold, and ſilver could make them; and ſo very expenſive were the nobles upon this occaſion, that they changed all the dreſſes of their rowers after the third race.

Laſt night the prince and Procuratore Rezzonico, the pope's nephew, gave a magnificent ball in his own palace to his royal highneſs, where there was a great number of Venetian nobility and foreigners of diſtinction.

Phi-

AMERICA.

Philadelphia, May 10.

BB the Olive Branch, capt. Robinſon, from Honduras Bay, we have advice, that the Spaniards had forbid the Engliſh from cutting wood in the Bay; upon which they had ſent an expreſs to Jamaica for aſſiſtance. See page 289.

By the London Gazette, dated St. James's, June the 19th, it appears, that letters lately received from New-York have brought an account of preliminary articles of peace having been concluded and ſigned by Sir William Johnſon, Bart. and the deputies from the Seneca Nation.

EAST INDIES.

THERE is publiſhed in the London Gazette, a further account of the operations in the Eaſt Indies, under major Adams, in a letter from him to the late Earl of Egremont; by which it appears that he has taken Mongear, in which there was a garriſon of 2000 men, and Patna; and obliged Coſſim Ali Cawn to retire with precipitation.—But the gentlemen and other priſoners who had fallen into the Nabob's hands, have all been maſſacred in the moſt inhuman manner. And it appears by the Gazette, and by other accounts, that the infamous villain who executed the orders of the Nabob for this purpoſe, was one Somers, a German, with a company of Seapoys trained up by himſelf, none of the country people being found capable of perpetrating ſuch a deed. Forty-nine gentlemen, 25 of them in irons, were murdered in one houſe, with about 50 ſoldiers in irons; and 9 gentlemen, with the remaining part of the Engliſhmen who were priſoners, were put to death in other parts of the country where they were confined, amounting in the whole to about 200. Dr. Fullarton was the only perſon who eſcaped from Patna, having received a pardon from Coſſim Ali Cawn a few days before the maſſacre.

COUNTRY.

Portſmouth, June 4.

LORD Clive (with a large retinue) ſet ſail for Bengal this afternoon at four o'clock.

Brumpton, near Chatham, June 18. This day, about eleven o'clock, we had a violent ſtorm of rain, thunder, and lightening, which did conſiderable damage on board the Ramillies man of war: a ball of fire was obſerved to fall on the fore-top, which ſhivered in pieces the fore and fore-top maſts, top gallant-yard, beat down two men (one of whom is in great danger) killed a dog, and had it not been for the heavy rain at the ſame time, the rigging, &c. would probably have been ſet on fire. Great damage was done to a farmer at Upper Delſe, his barn being almoſt beat down, and ſeveral trees ſpit aſunder. At Shinglewell, farmer Price had three men beat down by the lightening, one of whom was killed on the ſpot, and his cloaths entirely burnt. At the ſame time the lightening entered the guard-houſe at Gillingham-Fort, and broke a large looking-glaſs, and did other conſiderable damage.

By accounts from ſeveral other parts of the country, it appears, that the late ſtorms of thunder, hail, &c. have done great damages.

LONDON.

June 2. YESTERDAY a court of common council was held at Guildhall, when ſeveral reports from the committee of City Lands were read and agreed to. Sir Thomas Harriſon acquainted the court, that on the 7th of March laſt he waited on the right honourable Sir Charles Pratt, lord chief juſtice of his majeſty's court of common pleas, and preſented to his lordſhip the freedom of the city in a gold box, purſuant to the order of that court; and that his lordſhip was pleaſed to return a moſt obliging anſwer thereto.

4. This day being the anniverſary of the king's birth day, there was a very numerous and brilliant appearance of the nobility, foreign miniſters, and other perſons of diſtinction, to compliment his majeſty upon that occaſion.

5. Yeſterday Mr. Arnold, watchmaker, in Devereux-court, Temple-bar, waited upon his majeſty with a curious repeating watch, ſet in a ring, which was made by his majeſty's command: Mr. Arnold had the honour of being introduced to their majeſties, the princeſs dowager of Wales and the

the prince of Mecklenburgh, who were all graciouſly pleaſed to ſhew their approbation to ſo excellent a piece of mechaniſm.

The particulars of this curious repeating watch, are as follows, viz.

The movement compleat, is 2dwts. 2 grs. and an 8th of a grain.
Great wheel and ſuzee, 2 grs. and 3-4ths.
Second wheel and pinion, 3-4ths of a grain.
Barrel and main ſpring, 3 grs. and an half.
Third wheel and pinion, a 9th part of a gr.
Fourth wheel and pinion, 10th part of a gr.
Cylinder wheel and pinion, 16th part of a gr.
Balance, pendulum, cylinder, ſpring and collet, 2-3rds of a grain.
The pendulum ſpring, 300th part of a gr.
The chain, 1-half of a grain.
Barrel and main-ſpring, 1 gr. and 3 qrs.
Great wheel and rotchet, 1 grain.
Second wheel and pinion, 7th part of a gr.
Third wheel and pinion, 8th part of a gr.
Fourth wheel and pinion, 9th of a gr.
Fly-wheel and pinion, 17th of a gr.
Fly-pinion, 20th part of a gr.
Hour hammer, 1-half of a gr.
Quarter hammer, 1-half gr.
Rack, chain and pully, 1 gr. and 1-3d of a grain.
Quarter and half quarter rack, 2-3ds of a gr.
The quarter and half quarter ſnail and cannon pinion, 2-3ds of a grain.
The all or nothing piece, 1-half a grain.
Two motion wheels, 1 grain.
Steel dial plate with gold figures, 3 grs. and an half.
The hour ſnail and ſtar, 1-half of a grain, and the 16th part of a grain.

The ſize of the watch is ſomething leſs than a ſilver twopence; it contains one hundred and twenty different parts, and all together weighs no more than 5 dwt. 7 gr. and $\frac{3}{4}$.

9. His majeſty in council was this day pleaſed to order, that the parliament, which ſtands porogued to Thurſday the 21ſt of this inſtant June, ſhould be further prorogued to Thurſday the 16th day of Auguſt next.

18. This day, about three in the afternoon, the inhabitants of this city were greatly alarmed with ſome of the moſt dreadful peals of thunder ever heard in the memory of man, preceded by many ſtrong flaſhes of lightening, which in particular greatly damaged the weſt and north-weſt ſides of St. Bride's ſteeple in Fleet ſtreet.

A tree in Hyde park was almoſt ſhivered to pieces: a ſtack of chimnies fell down in Tyburn-road; and many young trees about Brompton, Chelſea, and Kenſington, were entirely deſtroyed.

A woman was killed by the lightening in the fields between Stepney and Limehouſe.

Two men were ſtruck blind, and a third killed at Sington, near Graveſend, in Kent.

The ſtorm did much damage in Eſſex, particularly at and about Raleigh, where the church and ſteeple were greatly ſhattered, and two horſes killed in a field at plough. Several perſons were ſtruck down and ſcorched by the lightening; but we do not hear of any one being killed.

Theſe are only a few inſtances of the diſmal effects of the late ſtorms.

22. Yeſterday was executed at Guildhall before Mr. Bennet, ſecondary of Wood-ſtreet Compter, a writ of enquiry of damages, wherein Meſſ. Wilſon and Fell, two eminent bookſellers in Pater-noſter-row, were plaintiffs, and three of his majeſty's meſſengers defendants, in an action of treſpaſs for entering the plaintiffs houſe and ſeizing their papers, &c. After many learned arguments by the counſel on both ſides, the jury, to compoſe which one perſon was ſummoned out of each Ward of this city, withdrew, and in about 20 minutes returned, and brought in the damages 600l.

26. Yeſterday a common-hall was held at Guildhall, for the election of ſheriffs for London and Middleſex, for the year enſuing; when John Lloyd, Eſq; and Charles Eaſtwick, Eſq; citizens and diſtillers, having the majority of hands, were declared duly elected.

B——KR——S.

May 29. Edward Houlgrave, of Liverpool, watchmaker.

June 2. Thomas Wiggleſworth and Richard Watkinſon, both of Leeds, Yorkſhire, linen-drapers.—John Stanford, now or late of Liverpoole in Lancaſhire, woollen-draper.

5. John Maxwell of Poole, haberdaſher.—Anthony Chapelle of Curzon-ſtreet, May Fair, Middleſex, Bookſeller.—John Stubbs, late of Cheſter, merchant.——Chriſtopher Quarton, of St. Paul's, Shadwell, mariner.

12. James Semple and John Steel, now or late of Huddersfield, Yorkſhire, linen-drapers.—Thomas Stretton, of Leiceſter, Leiceſterſhire, tallow-chandler.

16. John Lines, of Tunbridge in Kent, peruke-maker.

19. Thomas Carder, of Rumford in Eſſex, victualler.

23. Robert Taylor, of St. Giles's in the fields, grocer.—Henry Cole, of Briſtol, baker.—Tho. Brownbill, and Mary Syers, widow, of Liverpool, Brewers.—John Beavon, of Wellington, Shropſhire, mercer.—William Antrobus, of Northwich, Cheſhire, ſalt-dealer.—James Miers, of Loughborough, Leiceſterſhire, ſcrivener.—Benjamin Johnſon, of Hackney, dealer.——Samuel Pack, late of London, merchant.

26. John Ellis, of Hampſthwaite, Yorkſhire, grocer.

Engraved for the **General Magazine**, *for W. Owen at Temple Bar.*

Plate IV.

The Manyot.

The GENERAL MAGAZINE,

For JULY, 1764.

Of Diſeaſes in the Army.

DR. DONALD MONRO, phyſician to St. *George*'s Hoſpital, having been appointed phyſician to his Majeſty's Army in *Germany* during the late war, has ſince his return, publiſhed, and dedicated to the King, an excellent Account of the Diſeaſes which were moſt frequent in the *Britiſh* Military Hoſpitals, and the method of Treating them from the beginning of *January* 1761, to the return of the troops to *England* in *March* 1763; to which he has added, An Eſſay on the means of preſerving the Health of Soldiers, and conducting Military Hoſpitals.

To render his work ſtill more uſeful, the Author has occaſionally added, by way of Notes, the Practice of the moſt eminent Phyſicians in ſimilar Diſeaſes, and a few Hiſtories of Caſes, which paſſed under his own care in *St. George*'s Hoſpital, *London*.

To avoid Repetition of the Compoſition of particular Medicines, and the Interruption that would be given by their being inſerted in the Body of the Work, he has added a ſmall Pharmacopœa, to which his Practice in the Hoſpitals was chiefly confined——As he never was in any of the warm climates, nor ever at Sea along with Troops aboard of Tranſports, whatever he has mentioned relative to ſuch Situation, he profeſſes to have taken from printed Accounts of thoſe Subjects, or collected from the converſation of phyſical Gentlemen, who were employed on ſuch Services during the two former wars.

The Diſeaſes he treats of, are twenty-three in number—of which we ſhall ſelect, for the Entertainment of our Readers, his Account of the *Epidemical Catarrhal Fever, of April*, 1762, called The INFLUENZA, as it is but of a moderate Length.

"After the very cold ſevere Winter at *Bremen*, the weather, from being very cold, became of a ſudden extremely hot, about the 10th of *April*. In a few Days after, many People were ſeized with a violent Catarrhal Diſorder. It often began with ſuch a Cold and Shivering, that many imagined at firſt they were going to have Agues; but ſoon after they were attacked with a Cough, difficulty of Breathing, and a pain of the Breaſt, with a Head-ach, and Pains all over the Body, eſpecially in the Limbs.——The firſt nights they commonly had profuſe ſweats.——In ſeveral it had the Appearance of a remitting Fever, for the two or three firſt Days.———Many had a ſlight Inflammation of the Throat, and a Hoarſeneſs. In all it was attended with an acute Fever in the Beginning, and the Urine was of an high Colour, and when the Diſorder had put on the Appearance of a Remittent Fever in the Beginning, it dropt a ſediment towards Morning after the ſecond Day; and did the ſame in all, when the Diſorder was going off.——Some had a Purging, but the greater Number were rather

inclined to be coſtive.——The Cough in many was very violent; and the Patients, after each Fit of Coughing, had Reachings, or ſtrainings to vomit, exactly reſembling thoſe which come after violent Fits of the Hooping Cough.——At firſt the Patients ſpit up only a little Phlegm; but in the Decline of the Diſorder, they expectorated freely. The violent Cough and Feveriſhneſs generally continued for four, five or ſix Days; with others it continued longer; and ſome had a Cough for two or three weeks after the Fever left them.

This Catarrhal Fever ſeized moſt of the People of the Town of *Bremen*; and there were very few of the *Britiſh* who eſcaped it; at the ſame time it was epidemical in moſt Countries in *Europe*.

We treated it entirely as an inflammatory Diſorder, and none died who applied early for relief.—Moſt People recovered by one plentiful Bleeding, and taking the mild cooling Medicines, ſuch as the *Mixtura è Spermate Ceti cum Nitro*, the ſaline or *Mindereri* Draughts, or ſuch like. When the Fever and Difficulty of Breathing continued after the firſt Bleeding, in a Day or two a Vein was opened a ſecond Time; and immediately after a Bliſter was applied to the Back, which commonly removed the Fever, and relieved the Breathing.—When the Patients were inclined to be coſtive, a Doſe of Phyſic was of ſervice.

None of the *Britiſh* died, except one or two of the Soldiers, who remained in Quarters after being taken ill; and inſtead of Bleeding and living low, indulged in the Uſe of ſpiritous Liquors, and were not brought to the Hoſpital, till they were in the laſt Stage of a Peripneumony.—Many of the Inhabitants of the Town died of this Diſorder, which was probably owing to want of Care."

Of the Origin of SPRINGS.

PHiloſophers in all ages have formed various conjectures concerning the Origin of Springs; and great pains have been taken both by the Members of the *Royal Society*, and thoſe of the *Royal Academy of Sciences at Paris*, in order to aſcertain the true Cauſe of it. *Ariſtotle* was of opinion, as were moſt of the Ancients after him, that the air contained in the Caverns of the Earth being condenſed by cold near its Surface, was thereby changed into water; and that it made its way through, where it could find a paſſage: But no modern Tryals did ever yet ſucceed in the attempt of converting Air into Water.

Thoſe who imagine that Springs owe their riſe to waters brought from the ſea, by ſubterraneous Ducts, do indeed render a tolerable Account how they loſe their Saltneſs by percolation, as they paſs through the Earth; but find great difficulty in explaining by what power the water riſes above the Level of the Sea, to near the Tops of Mountains, where ſprings generally abound; it being contrary to the Laws of Hydroſtatics, that a fluid ſhould riſe in a Tube, above the Level of its Source. They have found two ways, however, whereby they endeavour to extricate themſelves from this difficulty: the one is that of *Des Cartes*, who imagines, that after the water is become freſh by percolation, it is raiſed out of the Caverns of the Earth in vapour towards its ſurface; where meeting with Rocks near the Tops of Mountains, in the form of Arches or Vaults, it ſticks to them, and then trickles down their Sides,

Sides, like water in an Alembic, till it ſupplies the fountains. Now this is a mere hypotheſis, without Foundation or Probability; for, in the firſt place, we know of no internal heat of the Earth to cauſe ſuch an Evaporation; or, if that were allowed, yet it is quite incredible, that there ſhould be any Caverns ſo ſmooth, and void of Protuberances, as to anſwer the end of an Alembic, in collecting and condenſing the vapours together, in every place where Springs ariſe. There are others, as *Varenius*, *&c.* who ſuppoſe, that the waters may riſe through the pores of the Earth, as through capillary Tubes, by Attraction; but hereby they ſhew that they are quite unacquainted with what relates to the motion of a fluid through ſuch Tubes. For when a capillary Tube opens into a cavity at its upper end; or grows larger and larger, ſo as to ceaſe to be capillary at that end; the water will not aſcend through that Tube into the Cavity, or beyond where the Tube is capillary; becauſe there the force of attraction is exerted the contrary way. Nay, if the cavity is continually ſupplied with water, it will be attracted into the capillary Tube, and run down it, as through a Funnel, if the lower end is immerſed in the ſame fluid, as in this caſe it is ſuppoſed to be.

It has been a generally received Opinion for many years paſt, and much eſpouſed by *Mariotte*, a diligent obſerver of Nature, that the Riſe of Springs is owing to Rain and melted Snow. According to him, the Rain-water which falls upon the Hills and Mountains, penetrating the Surface, meets with Clay or Rocks contiguous to each other, along which it runs, without being able to penetrate them, 'till being got to the bottom of the Mountain, or to a conſiderable diſtance from the Top, it breaks out of the ground and forms ſprings.

In order to examine this opinion, Mrs. *Perrault*, *de la Hire*, and *Sedileau* endeavoured to make an eſtimate of the Quantity of Rain and Snow that falls in the ſpace of a Year, to ſee whether it would be ſufficient to afford a quantity of water equal to that which is uſually diſcharged into the Sea by the Rivers. The reſult of whoſe Inqiries was, that the quantity of rain and ſnow which fell in a year into a cylindrical veſſel, would, if ſecured from evaporating, fill it to the height of about 19 inches: which quantity *Sedileau* ſhewed, was not ſufficient to ſupply the Rivers; for that thoſe of *England*, *Ireland* and *Spain*, diſcharge a greater quantity of water annually, than the Rain, according to that Experiment, is able to ſupply. Beſides which, another Obſervation was made by them at the ſame time, to wit, that the quantity of water raiſed in vapour one year with another, amounted to about 32 Inches, which is 13 more than falls in rain: A plain indication, that the water of Fountains is not ſupplied by Rains and melted Snow.

Thus the true cauſe of the Origin of Springs reſted undiſcovered, till the learned and ſagacious Dr. *Halley*, in making his celeſtial Obſervations upon the Tops of the Mountains at St. *Helena*, about 800 yards above the level of the ſea, found that the quantity of Vapour which fell there, even when the Sky was clear, was ſo great. that it very much impeded his Obſervations, by covering his glaſſes with water every half quarter of an hour; and upon that he attempted to determine by experiment the quantity of vapour exhaled from the ſurface of the ſea, as far as it ariſes from heat; in order to try if that might be a ſufficient ſupply

for the water continually diſcharged by ſprings. The proceſs of his experiment was as follows. He took a veſſel of water ſalted to the ſame degree with that of Sea water, in which he placed a Thermometer; and by means of a pan of coals, brought the water to the ſame degree of heat, which is obſerved to be that of the air in our hotteſt Summers: This done, he affixed the veſſel of water with the Thermometer in it, to one end of a pair of Scales, and exactly counterpoiſed it with weights in the other. Then, two hours after he found by the alteration in the weight of the veſſel, that about $\frac{1}{60}$ of an inch of the depth of the water was gone off in vapour; anſwering to $\frac{1}{10}$ of an inch in 12 hours. Now this obſerver allows the *Mediterranean* Sea to be 40 degrees long and 4 broad, the broader parts compenſating for the narrower; ſo that its whole ſurface is 160 ſquare degrees; which according to the experiment, muſt yield at leaſt 45280 millions of Tons: in which account, no regard is had to the wind, and the agitation of the ſurface; both which greatly promote evaporation.

This quantity of water was next to be compared with that daily conveyed into the ſame ſea by the rivers, by comparing them with ſome known River; and accordingly he takes his computation from the *Thames*, and to avoid all objections, makes allowances probably greater than were abſolutely neceſſary.

The *Mediterranean* receives the *Iberus*, the *Rhone*, the *Tyber*, the *Po*, the *Danube*, the *Neiſter*, the *Boryſthenes*, the *Tanais*, and the *Nile*. Each of theſe he ſuppoſes to bring down 10 times as much water as the *Thames*; whereby he allows for ſmaller Rivers, which fall into the ſame ſea. The *Thames* then he finds, by Menſuration, to diſcharge about 30,300,000 Tons of water in a day. If therefore the above nine Rivers yield 10 times the water as the *Thames*, it will follow, that all of them together yield but 1827 millions of Tons in a day; which is but little more than $\frac{1}{3}$ of what is proved to be raiſed in vapour out of the *Mediterranean* in the ſame time; we have therefore from hence a ſource abundantly ſufficient for the ſupply of fountains.

Having found, that the vapour exhaled from the ſea, is a ſufficient ſupply for the ſprings, he proceeds to conſider the manner in which they are raiſed, and how condenſed into water again, and conveyed to the ſources of the ſprings.

He conſiders, that if an atom of water were expanded into a bubble, ſo as to be 10 times as big in diameter as when water, that atom would become ſpecifically lighter than air, and therefore would riſe ſo long as the warmth which firſt ſeparated it from the watery ſurface, ſhould continue to diſtend it to the ſame degree; and conſequently that vapours may be raiſed from the ſurface of the ſea in that manner, till they arrive at a certain height in the Atmoſphere, at which they find the Air of equal ſpecific gravity with themſelves. Here they will float, till being condenſed by cold, they become ſpecifically heavier than air, and fall down in dew, or being driven by the winds againſt the ſides of the Mountains (many of which far ſurpaſs the uſual height to which vapours would of themſelves aſcend) are compelled by the ſtream of the air to mount up with it to the tops of them: where being condenſed into water, they preſently precipitate, and gleeting down by the Crannies of the Stone, part of them enters into the caverns of the Hills; which being once filled, all the overplus runs away by the loweſt place and breaking out by the ſides

of

of Hills, forms ſingle ſprings; many of which running down by the valleys, between the ridges of hills, and uniting, form little Rivulets or Brooks; many of theſe again uniting in one common valley, and gaining the plain ground, become a River; and many of theſe joining in a common channel, make ſuch great Rivers as the *Danube* and *Rhine*; the former of which, he obſerves, one would hardly think to be a collection of waters condenſed out of vapours, unleſs we conſider how vaſt a tract of ground that River drains, and that it is the Sum of all thoſe ſprings which break out on the ſouth ſide of the *Carpathian* Mountains, and on the north ſide of the immenſe Ridge of *Alps*; which is one continued chain of mountains from *Switzerland* to the *Black-Sea*.

Thus one part of the vapours blown on Land, is returned by the Rivers into the Sea; another falls into the Sea before it reaches land; whence the Rivers do not return ſo much water into the *Mediterranean* as is raiſed in vapours. A third part falls on the Low-lands, and is the *Pabulum* of Plants; where yet it does not reſt, but is again exhaled by the Sun, and either carried by winds to ſea, or elſe to the mountains for the ſupply of ſprings.

However, it is not to be ſuppoſed, that all ſprings are owing to one and the ſame cauſe; but that ſome proceed from Rain and melted Snow; becauſe the waters of ſeveral are found to increaſe and diminiſh in proportion to the Rains that fall; that others again, eſpecially ſuch as are ſalt, and iſſue near the Sea-ſhore, owe their Origin to Sea-water percolated through the Earth; and ſome to both theſe cauſes: though without doubt moſt of them, and eſpecially ſuch as ſpring near the tops of high Mountains, receive their waters from Vapours, as before explained.

A Narrative of the Effects of Thunder on three ſeveral Perſons at different Times in the Dioceſe of Toulouſe. *By the* Marcorelle.

THE 12th of *September*, 1747, about five in the Afternoon, the ſky was clear and ſerene, only a ſingle cloud to be ſeen, and that to all appearance perfectly round, of 15 or 16 inches diameter: immediately a rumbling and a clap of thunder were heard. A woman of *Bordenave* near *Grenade*, was ſtruck with it, and her right breaſt burnt, without her cloths or ſtays receiving the leaſt damage. Her eyes were open and fixt, her whole body motionleſs, her pulſe quite ſtopt, and ſhe was thought to be dead. In this condition ſhe continued from five in the afternoon till one the next morning, when ſhe recovered her voice, and at three her ſight, without the leaſt remembrance of the accident. Half an hour after this, ſhe was ſeized with an exceſſive coughing; ſhe was let blood, but to no purpoſe, in hopes of eaſing her reſpiration, for the difficulty ſubſiſted to the laſt moment of her life, five and twenty hours after ſhe had received the ſtroke.

There are two things remarkable in this event: in the firſt place, it is no ways favourable to the opinion of many, who account for the formation of thunder from a compreſſion of air between two, or more clouds; and ſecondly, it is repugnant to the common maxim, that it never thunders in fine weather, according to *Virgil*,

——*Cœlo nulla ſereno,*
Nec leviter denſis deſcendunt nubibus umquam.

The

The daughter of a maſon at *Leguevin*, a hale ſtout girl, was in a houſe on which a flaſh of lightening fell, and killed two perſons near her. All her cloaths were burnt, her ſkin ſcorched from head to foot, and it was believed ſhe was dead: however a little while after ſhe was perceived to breathe, and immediate care was taken for her relief, notwithſtanding which the burn grew worſe for a week after the accident, and then began to mend, ſo that at the end of a fortnight it was in a manner healed: but a deafneſs of a very ſingular kind continued upon her, for ſhe remained quite inſenſible of the noiſe of thunder, though ſhe heard all other ſounds perfectly well, whether weak or loud, the hammering at a Smith's forge in the neighbourhood, the ringing of bells, and people's converſation. Thus ſhe continued two months and never perceived any ſound of the thunder which happened ſeveral times in that interval: when being one day employed in the garden, ſhe heard it thunder again for the firſt time, with the ſenſation of a plug being forced out of her ear. From that moment ſhe has continued to hear thunder as diſtinctly as other folks.

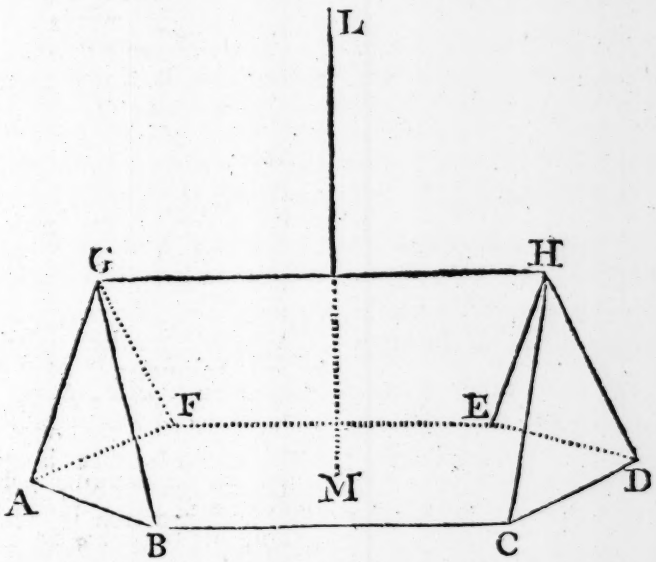
A Maſon of *Toulouſe* three and twenty years of age, was ſeized about the middle of January, 1748, with a very painful diſorder of the throat, ſo that whilſt it laſted he could ſwallow nothing but a ſort of ſoup made of yolks of eggs, and that with much difficulty. About two months after his complaint had ceaſed, it came on a freſh, accompanied with a ſudden difficulty of expreſſing himſelf, and ſo great a deafneſs, that he could not at all hear human ſounds, nor the ringing of bells, nor the beating of anvils, nor thunder, nor even the noiſe he made himſelf in chipping his bricks. The 11th of *July* the ſame year, whilſt he was at work, there was a rumbling of thunder, which he heard nothing of; but about ſix in the evening of the ſame day, his eyes were dazzled with one of thoſe terrible flaſhes of lightning which produced immenſe miſchief at the houſe of the Jeſuits and the Poſt-office; he quitted his ſtation in the utmoſt horror and took ſhelter in a corner, where he was ſcarce able to ſupport himſelf on his legs. From that inſtant the maſon recovered his faculty of hearing, and continues now quite ſenſible of the ſound of bells, thunder and verbal converſation, can nicely diſtinguiſh tones and finds no difficulty in expreſſing his thoughts by his words.

May I be permitted to offer one ſhort reflection on this ſingular caſe? Is it not probable that ſome particular humor had benumbed the organs of the hearing and voice (which have a remarkable conſent with each other) and that their activity was reſtored by a diſſipation of that humor effected through the ſtrong agitation of the air excited by the violent clap of thunder? And may not hopes be entertained, that a cure may be wrought in deafneſs, at leaſt of a certain kind, by giving a lively concuſſion to the drum of the ear, by means of a tremulous agitation of the air from ſome artificial noiſe ſimilar to that of thunder? As every ear is acquainted with the tone of thunder, it may perhaps be no very difficult matter to find out a uniſon to it.

An

An account of the double Refraction of Cryſtals; by Father John Beccaria, *Profeſſor of Experimental Philoſophy at* Turin. *Tranſlated from the Latin.*

LET a Priſm of Mountain Cryſtal be cut in the following Manner.



The hexagonal Face A B C D E F is a ſection to which an imaginary axis L M is perpendicular: the two quadrilateral faces G B C H, F G H E are ſections converging to the axis L M; the four Triangles A G B, A G F, E H D, C H D are the reſidual Parts of the rectangular Faces which ſurrounded the Cryſtal.

Thus I ordered a Priſm to be cut, that from a due conſideration of it the law of the double Refraction might at any time appear, which I had found to obtain in whole Cryſtals as well as cut ones of different forms. For after I had cauſed ſeveral mountain cryſtals in their native form to be poliſhed, whenever I looked through either of the angles conſtituted by the alternate rectangular Faces, the object always appeared double, both images being coloured; and the object in like manner appeared double, and alſo coloured, whenever I beheld it through one of the Faces of the Triangles, which are in the Vertex, and through one of the rectangular Faces adjacent to the Axis.

Moreover, when I had procured ſeveral whole cryſtals to be cut in the direction of the Axis, ſome with the ſection paſſing through the apexes of the oppoſite angles, others with the ſection biſſecting the triangular Faces in their Vertex and the triangular ones in their Side; when I looked through the parts ſo cut I ſtill ſaw the object double, and each image coloured.

Only in the caſe when I looked thro' one of the triangular Faces in the vertex, and thro' the face parallel to the baſe of the Cryſtal, or to which the axis is perpendicular, the two coloured images (whether I uſed the cryſtal, intire or cut in any manner) were perfectly united in one ſingle image. From whence I came to the following concluſion. *That the Rays of Light, which in Mountain Cryſtal do paſs through the inclined Faces, ſo as to proceed tranſverſely to the Axis, are moſt of all divaricated into two Spectra:*

Spectres: And that thoſe two Spectres do moſt perfectly coaleſce into one, when the Rays of Light paſs through the Faces of the Priſm inclined to each other, ſo as to proceed with the greateſt Obliquity to the Axis.

And I think, as I hinted before, that a Priſm cut as above deſcribed, is the propereſt to prove theſe Facts by; ſince in looking through an Angle of it whoſe Vertex is in the right Line G H, the Spectre of the Object appears double: for then the Rays paſs moſt tranſverſely to the Axis L M; and in looking through an Angle whoſe Vertex is in the right Line B C, or through an other whoſe Vertex is in the right Line F E, the double Spectre is accurately united in one, becauſe the Rays paſs the leaſt tranſverſely to the axis.

Huyghens and *Newton* both take notice of a double Refraction in Mountain Cryſtal; but then they do not give any proper characteriſtic of ſuch double Refraction. *Huyghens*, in his Treatiſe *ſur la Lumiere*, Chap. V. concerning the wonderful refractions of *Iſland* Cryſtal has theſe words; *In the Mountain Cryſtal there is likewiſe a double Refraction, though leſs ſenſible*, &c. And *Newton* ſays, in the 25th Query of his *Optics*, *In like manner Cryſtal of the Rock has a double Refraction, but the difference of the two Refractions is not ſo great and manifeſt as in Iſland Cryſtal.*

But the truth of the matter is, there is no agreement between the double Refraction of Mountain Cryſtal and the double Refraction of Iſland Cryſtal, except in the number. The double Refraction of Iſland Cryſtal happens in a Ray paſſing through parallel Faces; the double Refraction of Mountain Cryſtal happens in a Ray paſſing through Faces mutually inclined to each other. The double Image of the former is void of colour, becauſe the heterogeneous Rays paſſing through parallel Faces do ſeparate, by an equal Interval, into two Rays: The double Image of the latter is coloured, becauſe the heterogeneous Rays paſſing through mutually inclined Faces, do ſeparate unequally. Furthermore as it was thought expedient to try what is the poſition in the Figure of the Iſland Cryſtal, of the Line according to which objects are doubled, I judged it equally fit to ſettle the poſition in the figure of the Mountain Cryſtal, of the line according to which objects are both doubled and coloured.

After all, are there no other Bodies beſides Mountain Cryſtal and Iſland Cryſtal, in which a double, or even a manifold Refraction obtains? *S'Graveſande* in an equiangular Priſm of the *Braſil* Pebble, diſcovered a double Refraction in every one of the Angles, but different in each of them. Is not this a univerſal Law in all diaphaneous Bodies to which nature has aſſigned determinate Figures, that they ſhould have a determinate Mode analogous to their Figure, both as to the number of Refractions, and the Quantity of them? Is not ſuch variety in the number and quantity of the Refractions, the manifeſt way by which nature proceeds from perſpicuity to Opakeneſs? If in a ſeries of tranſparent Foſſile Bodies, every difference of Refractions, even that of their numbers, were carefully aſcertained, might not this be of great Uſe towards determing the ſtructure and Geneſis of ſuch Bodies, and for inveſtigating the Cauſe of all Refractions and Reflexions? To me it ſeems extremely probable, that all Refractions and Reflexions of Rays of Light are effected by the Force of that Electric Fire whereby Mediums which have an unequal refracting or reflecting Power, are ſeparated.

Deſcription

Deſcription of the MANIHOT.

THIS plant is named *Manihot*, and *Manyot*, in America, where the bread which is made of its root is called Caſſava. It grows from eight to nine feet high, and its ſtalk is red. To multiply it, they cut this ſtalk into pieces of about the length of one's hand, they put them into the ground like the ſugar-canes, and the year following they have a root of which the bread is made, as will be ſeen in our next plate.

I found, in the month of June, 1700, this brown and hairy caterpillar upon the leaves of that plant, upon which it fed, and with which I fed it till the 12th of the ſame month; it was then changed into a *Nympha*, ſuch as is here ſeen upon a leaf. The firſt of July a Butterfly came out of it, ſpeckled with black and white.

For the embelliſhment of the plate, I have put upon that plant a little animal which is called *Sauvegarde*, and which in time becomes as large as a Crocodile, often of twelve feet. It lives upon carrion, but is not an enemy to man, like the Crocodile. When it wants to lay its eggs, Nature teaches the female to dig the ſand upon the ſide of ſome river, where ſhe leaves them to be hatched by the heat of the ſun. The Indians eat thoſe eggs, which are as large as thoſe of an Indian Hen, but a little longer. This animal is amphibious, living equally upon land and in the water; ſo that when he can find no carrion he makes war with the fiſhes, and when theſe are wanting he lives upon flies and piſmires.

On the LAWS *of* ENGLAND.

Cuſtoms of Dunmow and Whichnor manners.

THE cuſtom of the priory of Dunmow, in the county of Eſſex was ſuch, that if any perſon from any part of *England* came thither, and humbly kneeled on two ſtones at the church door (which are yet to be ſeen) and ſolemnly took the enſuing oath before the prior and convent, he might demand of them a Gamon or Flitch of bacon:

" You ſhall ſwear by the cuſtom of our confeſſion,
That you never made any nuptial tranſgreſſion,
Since you were married to your wife,
By houſehold brawles, or contentious ſtrife;
Or otherwiſe in bed or at board,
Offended each other in deed or in word,
Or ſince the pariſh clerk ſaid Amen,
Wiſhed yourſelves unmarried agen;
Or in a twelvemonth and a day,
Repented not in thought any way;
But continued true and in deſire,
As when you joined hands in holy quire.
If to theſe conditions, without all fear,
Of your own accord you will freely ſwear,
A gamon of Bacon you ſhall receive,
And bear it hence with love and good leave;
For this is our cuſtom at Dunmow, well known,
Though the ſport be ours, the bacon's your own.

It appeareth in an old regiſter of this priory, that Richard Wright of Badeſnorth in Norfolk, in the 23 of Henry VI. when John Canon was prior, that Steven Samuel of Little Eaſton in Eſſex, 7o Edward 4, when Roger Ruleot was prior, and that Thomas Lee of Coxal in Eſſex, 2 Hen. 8. when John Taylor was prior, demanded their bacon upon

the terms above ſaid, and received it accordingly. *Blunt*'s Ten. 162. Compl. Copyh. 175. *Camd.* Brit. 413.

Sir Philip de Somervile, knight, held the manor of Whichnour in Com. Stafford of the earl of Lancaſter, then lord of the honour of Tutbury, by this memorable ſervice, viz.

That the ſayd Sir Philip ſhall fynde, meynteinge, and ſuſteigne one baconne flyke, hanginge in his halle at Wichenore, ready arrayed all times of the year, bott in Lent, to be given to everyche mane or womane married, after the day and yere of their marriage be paſſed; and to be given to everyche mane of religion, arch-biſhop, prior, or other religious, and to everyche preeſt, after the yere and day of their profeſſion finiſhed, or of their dignity receyved, in form following, whenſoever that ony ſuch before named wylle come for to enquire for the Baconne, in their own perſon, or by any other for them, they ſhall come to the Bayliffe or to the porter of the lordſhip of Whichenour, and ſhal ſay to them, in the mannere as enſewethe.

Bayliffe, or Porter, I doo you to knowe, that I am come for myſelf (or if he come for any other, ſhewing for whome) to demand one bacon flyke, hanging in the halle of the Lord of Whichenour, *after the forme thercunto belonginge.*

After which relation, the bailiff or porter ſhall aſſigne a daye to him, upon promiſe by his feythe to return, and with him to bring tweyne of his neighbours, and in the meyn time the ſaid bailiff ſhall take with him tweyne of the freeholders of the lordſhip of Whichenour, and they three ſhal goe to the mannour of Rudlowe belonging to Robert Knyghtleye, and there ſhall ſomon the aforeſaid Knyghtleye or his bayliffe, commanding hym to be ready at Whichenour, the day appoynted, at Pryme of the day, with his carriage, that is to ſay, a horſe and a ſadyle, a ſakke and a pryke, for to convey and carry the ſaid baconne and corne a journey owt of the countee of Stafford, at his coſtages: and then the ſayd bailiffe ſhal, with the ſaid freeholders ſomon all the tenants of the ſaid manoir, to be ready at the day appoynted at Whichenour, for to doe and performe the ſervices, which they owe to the baconne; and at the day aſſigned all ſuch as owe ſervices to the baconne, ſhall be ready at the gatte of the manoir of Whichenour, fromé the ſonne riſinge to noone, attendyng and awayting for the comyng of hym that fetcheth the baconne; and when he is comyn, there ſhal be delivered to hym and his ſelowys chapeletts, and to all thoſe whiche ſhal be there, to doe their ſervices due to the baconne: and they ſhal lede the ſaid demandant wythe tromps and tabours and other manner of mynſtralſeye to the hall dore, where he ſhal fynde the lord of Whichenour or his ſteward redy to deliver the baconne in this manere.

He ſhall enquere of hym which demandeth the baconne, if he have brought tweyne of his neighbours with hym, which muſt anſere, *they be here redy*; and then the ſteward ſhal cauſe theis two neighbours to ſwere, yf the ſeid demandant be a weddyt man, or have be a man weddyt; and, yf ſyth his marryage one yere and a day be paſſed; and yf he be a freeman or a villeyn; and yf his ſaid neighbours make othe, that he hath for hym all theis three poynts reherſed, then ſhall the baconne be take down and broght to the halle dore, and ſhal there be layd upon one half a quarter of wheatte and upon one other of rye; and he that demandeth the baconne ſhal kneel upon his knee, and ſhal hold his

his right hande upon a booke, which booke ſhal be layd above the baconne and the corn, and ſhal make oath in this mannere;

Here ye, Sir Philip de Somervyle, lord of Whichenour, mayntayner and giver of this baconne, that J. A. ſyth I wedded B. my wife, and ſyth I had her in my keeping and at my wylle, by a yere and a day after our marryage, I wold not have changed for none other, farer ne fowler, richer ne powrer, ne for none other deſcended of gretter lynage, ſlepying ne waking, at noo tyme. And if the ſaid B. were ſole and I ſole, I wolde take her to be my wife before all the wymen of the worlde, of what condytions ſoevere they be, good or evyle, as helpe me God and his ſeyntys, and fleſh and all fleſhes.

And his neighbours ſhal math oath, that they truſt verily he hath ſaid truely: and yf it be founde by his neighbours before named, that he be a freeman, there ſhall be delyvered to him half a quarter of wheatte and a cheeſe; and if he be a villeyn, he ſhall have half a quarter of rye, without the cheeſe; and then ſhall Knyghtley, the lord Rudlowe, be called for to carry all theis thynges to fore reherſed; and the ſayd corne ſhall be layd upon one horſe, and the baconne above that, and he to whom the baconne apperteyneth ſhal aſcend upon his horſe and ſhal take the cheeſe before hym, if he have a horſe, and yf he have none, the lord Whinchenour ſhal cauſe have one horſe and ſadyl, to ſuch tyme as he be paſſed his lordſhippe; and ſoe ſhal they departe the manoyer of Whichenour with the corne and the baconne to fore him that hath wonne ytt with trompets, tabourets, and other manoir of mynſtrale: And all the free tenants of Whichenour, ſhall conduct him to be paſſed the lordſhip of Whichenour, and then ſhal all they retorne, except hym, to whom apperteigneth to make the carriage and journey withoutt the countye of Stafford, at the coſtys of his lord of Whichenour. *Blunt*'s Ten. 95.

J. R.

A remarkable inſtance of a chief juſtice of England's being fined for eraſing a record.

Tenor and Purport.

At common law there was but little room for amendments, which appears by the ſeveral ſtatutes of amendments and jeofails, and likewiſe by the conſtitution of the courts; for the judges are to record the words deduced before them in judgments; Edward I. granted to his juſtices to record the pleas pleaded before them, but they are not to *eraſe* their records, nor *amend* them, nor record againſt their inrolment, nor any way ſuffer their records to be a warrant to juſtify their own *miſdoings*.

The ordnance of Edward I. was ſo ſtrictly obſerved, that when ch. juſt. *Ingham*,† in his reign, moved with compaſſion for the circumſtances of a poor man who was fined 13s. 4d. eraſed the record, and made it 6s. 8d. he was fined * 800 marks.

Hence it appears, that *regularly* at common law, neither falſe Latin, the omiſſion of a word, ſyllable or letter, or other defect or variance from the *approved* and *legal* forms, were amendable. *Bac. abr.* 89.

The ſtatutes of amendment do not extend to the *king* or to *any criminal proceeding*. *Id.* 95.

† Biſhop Nichol. Eng. hiſt. Lib. 228. 3 Seld. 1881.
* See 3 Seld. 1911. Nichol. Eng. hiſt. Lib. 228.

The judges of England are bound by their oath of office, as well as by their duty, to adminiſter juſtice *according to the law of the land*, otherwiſe the diſpoſal of the lives, liberties, and properties of *Engliſhmen* would depend on the *diſcretion* of a *judge*, and not on the *rule of law*.

If they are therefore to act *according to a ſet rule*, from which they may *not* depart, what *command* ſoever they *receive*, they do not act by a power from *him*, but by *one* that is above *both*. This is commonly confeſſed; and though ſome judges have been found, in ſeveral ages, who, in hopes of *reward* and *preferment*, have made little account of their *oath*, yet the ſucceſs that many of them have had, may reaſonably deter others from following their example; and if there are not more inſtances in this kind, no better reaſon can be given, than that *nations do frequently fail* by being too remiſs in *aſſerting their own rights*, or *puniſhing offenders*, and hardly ever err on the *ſeverer* ſide. *Alg. Sidney*'s Diſc. concerning government, chap. 3. ſect. 2. p. 370.

Among many exceptions to an indictment for compoſing, making, writing, and induſtriouſly collecting many falſe and ſcandalous *libels*, in one of which is contained, amongſt other things, according to the *tenor* and to the *purport* following, viz. and [then ſhews the words of the *libel*, &c.] one was that it was not ſufficiently and certainly ſhewn, that the words contained in the indictment were the ſame with thoſe in the libel, but not allowed, for by the court the words [according to the *tenor* following] aſcertain and ſatisfy the court, that thoſe are the ſpecific words mentioned in the libel, *but if it had been only to the purport following, it had been ill, becauſe it had not imported that the words were the ſpecific words which were in the libel.* Ld. *Raym.* 415. 12 *Mod.* 218, 2 *Salk.* 417. *Carth.* 409.

Tenor and Purport.

Actions on wagers or Bets.

Promiſe to pay for an horſe, a barley-corn a nail, and to double each nail; and avers, that there were thirty-two nails in the horſe's ſhoes, that doubling each nail, came to five hundred quarters of barley; and upon no ſuch promiſe, the cauſe being tried before *Hyde* at *Hertford*, he directed the Jury to give the value of the horſe in damages, being eight pounds, and ſo they did. *Lev. Rep.* 111. *Vin* abr. 321. pl. 86. *Vent.* 267. *Keb. Rep.* 569 pl. 18.

Promiſe, That in conſideration of half a crown by plaintiff paid to defendant, and of 4l. 17s. 6d. to be paid upon defendant's performing the agreement of his part, delivered to plaintiff two grains of rye-corn on Monday the 29th of March in ſuch a year, and four grains of rye-corn on Monday then next following, and eight grains of rye-corn on Monday next after the Monday laſt mentioned, and ſixteen grains of rye-corn on Monday next after the ſaid third Monday, and double the number of grains of rye-corn, viz. thirty-two grains of rye-corn on Monday next after, being the fifth Monday, and ſo on by progreſſional arithmetic ſhould deliver every other Monday, ſucceſſively, twice ſo many grains of rye-corn as were reſpectively to be delivered the Monday next before: no ſuch promiſe pleaded. The court ſaid, let them go to trial; and though this would amount to a vaſt quantity, yet the jury will conſider of the defendant's folly, and give but reaſonable damages againſt him. 6 *Mod.* 305. 2 Ld. *Raym.* 1164. 3 *Salk.* 97. pl. 6. 4 *Vin.* Abr. 534. pl. 2.

Lord

Lord chief juſtice *Holt* ſaid in particular, Suppoſe *A*, for money paid him by *B*. will undertake to do an impoſſible thing, ſhall not an action lie againſt him for not performing it; as in caſe of a bond with an impoſſible condition, the bond is ſingle. So where a man will, for a valuable conſideration, undertake to do an impoſſible thing, though it cannot be performed, yet he ſhall anſwer damages. 2 Ld. *Raym.* 1165.

Powel, juſt. ſaid, that though the contract was a fooliſh one, yet it would hold in law, and that the defendant ought to pay ſomething for his folly. *id. ib.*

Theſe caſes bring to my remembrance that of a gentleman who gave another a certain ſum of money, upon his agreeing to pay him ſo much a day till the queen (her preſent majeſty) ſhould land at Greenwich; the matter in diſpute upon that occaſion was, whether as her majeſty did not land at Greenwich but at Harwich, occaſioned by ſtreſs of weather, the daily payment was to continue till her majeſty ſhould land at Greenwich, or whether it ought to be preſumed that the intent of the parties was till her majeſty landed in England.

N. B. An opinion on this caſe is deſired.

QUERIES.

1. Is there in fact, any avowed or ſtanding rule for the legal interpretation of wills concerning heirs at law; and are expreſs words, or neceſſary implication ſuch a rule?

2. What qualification is eſſentially requiſite to conſtitute and circumſcribe a deviſe, with expreſs words or neceſſary implication?

3. If the words of a deviſe be doubtful, or ſo ſuſceptable of two contradictory meanings, that the one eſtabliſhes the title of a lawful heir, and the other lays it aſide, how ſtand precedents on ſuch occaſions, and what ſays the law?

4. Is the title of an heir at law, in contra diſtinction of that of a deviſee, to be weighed with the ſame inflexible hand as that of indifferent parties, whoſe title may appear counterbalanced by words of a doubtful import?

5. If the words of a deviſe be ſo doubtful as to hang in *Equilibrio* between the title of an heir, and that of a deviſee; is this very doubt a legal foundation for the title of the heir to prevail?

ANSWER.

The ſtanding rule for the legal interpretation of wills concerning heirs at law, ſeems to be as follows, viz. That if an heir at law is to be diſinherited by a will, the words thereof muſt be expreſs and clear, for no interpretation whatever will be admitted that tends to diſinherit an heir at law; and if a deviſe be made to a perſon and his heirs, which perſon is heir at law to the deviſor; this is a void deviſe, and the heir ſhall take by deſcent as his better title. See *Gilb.* dev. 110. 2 *Bac.* abr. 79. 2 *Burn's* eccleſ. law. 549.

This anſwer ſeems applicable to the reſt of the above queries.

An Engliſh lawyer.

Remarkable expreſſion of Lord Chief Juſtice Holt.

Lord Chief Juſtice Holt ſaid, That the reaſon a knight was to be on a jury when a peer was concerned, was for the ſecurity of the commons; for a knight was preſumed to be a man of courage, and not afraid to look a peer in the face. 11 *Mod.* 102. But this challenge is now taken away by ſtat. 24 Geo. 2. c. 18. ſ. 4.

Judges

Judges Salaries.

The judges had an act of parliament for their ſalaries, which were to be paid out of the arrears of the cuſtoms, by the cuſtomers and comptrollers of London, and it was enacted, they ſhould pay to the juſtices out of the firſt monies ariſing out of the cuſtoms, and that they ſhould have their proportion by the day; and it was held the cuſtomers were liable, though the king granted a licence to ſome merchants to retain the cuſtoms in their hands; they met at Whitefriars to conſider of this, and agreed to ſue, the cuſtomers complied. 1 *H.* 7. 3.

This act was made in Henry the ſixth's time, but here was a proviſo therein, that they ſhould not receive it out of the cuſtoms, till it appeared by the chancellor's examination of the clerk of the Hamper that he had not ſufficient; and afterwards the judges had a privy ſeal to receive their ſalaries, for the mean time between the death of Richard the third and the date of the patents in Henry the ſeventh, as they had from the death of Henry the ſixth to the date of their patent in Richard the third's time. Id. 4, 5. *Forteſc. Rep.* 386, 387.

By the act for the further limitation of the crown, and better ſecuring the rights and liberties of the ſubject it is enacted, that ſome further proviſion be made for ſecuring our religion, laws, and liberties, from and after the death of his majeſty and the princeſs Anne of Denmark; and in default of iſſue of the body of the ſaid princeſs, and of his majeſty reſpectively, that in ſuch caſe, after the ſaid limitation ſhall take effect, as aforeſaid, the ſalaries of the judges ſhall be aſcertained and eſtabliſhed. 12 & 13 *W.* 3. c. 2. ſect 13.

His late majeſty, king George the firſt, was pleaſed to increaſe the ſalaries of the two chief juſtices, and chief baron, from 1000l. to 2000l. a year; and the ſalaries of the reſt of the judges from 1000l. to 1500l. a year, by diſtinct patents from thoſe by which they were appointed judges. 2 Lord *Raym.* 1319.

And now the following ſums are to be paid in augmention of judges ſalaries, viz. 500l. to each of the puiſne judges of the court of King's Bench; 500l. to each of the judges in the court of Common Pleas; 1000l. to the chief baron of the Exchequer; 500l. to each of the other barons of the Coif; 200l. to the chief juſtice of Cheſter; 150l. to the ſecond juſtice of Cheſter, 150l. to each of the Welch judges. 32 Geo. 2. c. 35. ſect. 18.

Such ſalaries as are ſettled upon any judge by act of parliament, or has been, or ſhall be granted by his majeſty to any judge, ſhall, in all time coming, be paid to him, ſo long as his patent and commiſſion ſhall continue in force.

The ſalaries of judges, as are now, or ſhall become payable out of the annual ſum granted for the ſupport of his majeſty's houſehold, and the honour and dignity of the crown, ſhall after the demiſe of his majeſty, be charged upon, and paid out of, ſuch duties granted for the uſe of his majeſty's civil government, as ſhall be ſubſiſting after ſuch demiſe, until ſome other proviſion be made by parliament, for the expences of the civil government; and from the making ſuch proviſion, and during the continuance thereof, ſuch ſalaries ſhall be paid out of the monies applicable to ſaid uſes and expences. 1 Geo. 3. c. 23. ſect. 3, 4.

A. B.

A PROPOSAL *for a further Regulation in Trials by* JURY.

It is generally agreed, That from the inſtitution of the trial *per pays*, a jury never *Juries.*

never conſiſted of leſs than twelve men; but it is not an improbable conjecture, that, antecedent to the Statute of Weſtminſter the ſecond, they frequently conſiſted of more, though it was not neceſſary that all above that number ſhould concur in the verdict.

The lord chief juſtice Hale, in his hiſtory of the common law of England, ſays, That, by the laws of Normandy, though a verdict ought to be by the concurring conſent of twelve men, yet, in caſe of diſagreement of the jury, they uſed to put off the leſs number that were diſſenters, and add a kind of tales equal to the greater number agreeing, until they had got a verdict of twelve men that concurred: and it appears by Bracton, that the like practice was in his time uſed in England; and even at this day, on grand juries, coroners juries, and on the taking other inquiſitions, more than twelve are ſworn, tho' the concurrence of twelve only is ſufficient to give a verdict.

How ſo reaſonable a practice came into Diſſuetude on trials of iſſues, does not clearly appear; but it is not altogether improbable, that the ſtatute of 13 Edw. I. giving a new writ of *Venire Facias*, and mentioning in the form thereof no other number than that of twelve, might be the original reaſon of confining juries on the trial of iſſues to that preciſe number; for as in all other juries, not ſummoned by Venire, more than twelve are frequently ſworn, one may ſuppoſe, that before the ſtatute created or altered that writ, the practice on all juries was alike.

But upon whatever foundation it might originally ariſe, the law now requiring all the jurors to be of one opinion, foreigners, who live in arbitrary governments, and envy the liberty we enjoy by this kind of trial, conſider it as an abſurd principle in policy; for that 'tis weak to preſume, that twelve men joined together can all reaſon and conclude alike in every caſe.

An anſwer to this cenſure does not readily occur; and if it be true, that caſes may happen, where the jury may conſcientiouſly, upon mature conſideration, eſſentially diſagree, it is a dreadful dilemma they fall into, if they are honeſt men; for they cannot by law be diſcharged, without one ſubmits his conſcience to another, or ſuffers death for conſcience-ſake.

Under ſuch circumſtances therefore, the apparent conſequence is, that juſtice is perpetually in danger of being perverted; for if only one juryman can be procured, or merely through prejudice, party, or obſtinacy, ſhall be reſolved to inſiſt on a verdict againſt evidence, it will in moſt caſes be in his power to bring over the other eleven, who will not run the riſque of being locked up with ſuch a man. Hence it is that verdicts are ſo often found directly contrary to evidence, of which many inſtances might be given, if neceſſary; but it is evident, from the nature of the caſe, without having recourſe to inſtances, that as there can be no verdict, if one only diſſents, the conſciences of ſome muſt be ſubject to the controul of others, and that honeſt men may often be forced to become the inſtruments of injuſtice.

It may be ſaid, that although there is ſome ground for what has been obſerved, yet as it is a matter touching one of the chief excellencies of the Engliſh conſtitution, it will be dangerous to meddle with it.

Certainly, if no remedy could be had, without taking juries away, or rendering their barrier weaker — between the crown and the people, it ought not to be attempted.

But

But it is conceived, that an effectual amendment may be made, without *at all* endangering the conſtitution, by inſerting a clauſe in ſome future bill, whereby it ſhall be made neceſſary, that on every iſſue, fifteen jurors at leaſt ſhall be ſworn; but that if twelve only concur, their verdict ſhall be ſufficient.

If this can be ſafely done, it ſeems a reaſonable amendment; and as no caſe will hardly ever happen in which more than three jurymen will differ from their fellows, it is probable it may be an effectual remedy.

A Deſcription of a Hiero's Fountain *of a ſtupendous Height, for raiſing Water out of the Mines of* Chremnitz *in* Hungary; *lately erected under the Direction of Father* Maximilian Hell, *Imperial Profeſſor of Aſtronomy at* Vienna. *Tranſlated from the Latin of Dr.* Wolfe.

THIS machine, though not of a new conſtruction, yet no account of its immenſe ſize, and the moſt extraordinary formation of ice and ſnow by the working of it, well deſerves to be deſcribed; beſides that it is the only one of the kind that has been applied to large Works. *See the Figure.*

N is a wooden Trough in the Middle of the Mountain, 143 Feet above the Horizon, into which water is conveyed from the mines above it.

O is like a Trough, on the Top of the Mountain, 260 Feet above the Horizon, into which Rain-water is conveyed for the Purpoſes of the Work.

A is an Air-veſſel placed at the Foot of the Mountain, into which the water runs out of the Trough N or O, through the Pipes R T, or G T, and the Turn-cock H, by which Means the Air in the Veſſel A is compreſſed and forced through the Tube L M M, into the lower Veſſel B.

B is a Veſſel ſimilar to A, placed at the Bottom of the lower Mine, 104 Feet below the Veſſel A, which receives the Waters collected in this Mine, from the Trough D, which by the Force of the compreſſed Air, is to be raiſed and diſcharged thro' the Pipe F S Q.

K is a Pipe with a Turn-cock, for diſcharging the Water out of the Veſſel A, when the Operation is over, to which purpoſe the ſmall Pipe I is likewiſe ſometimes uſed.

L tranſmits and diſcharges Air.

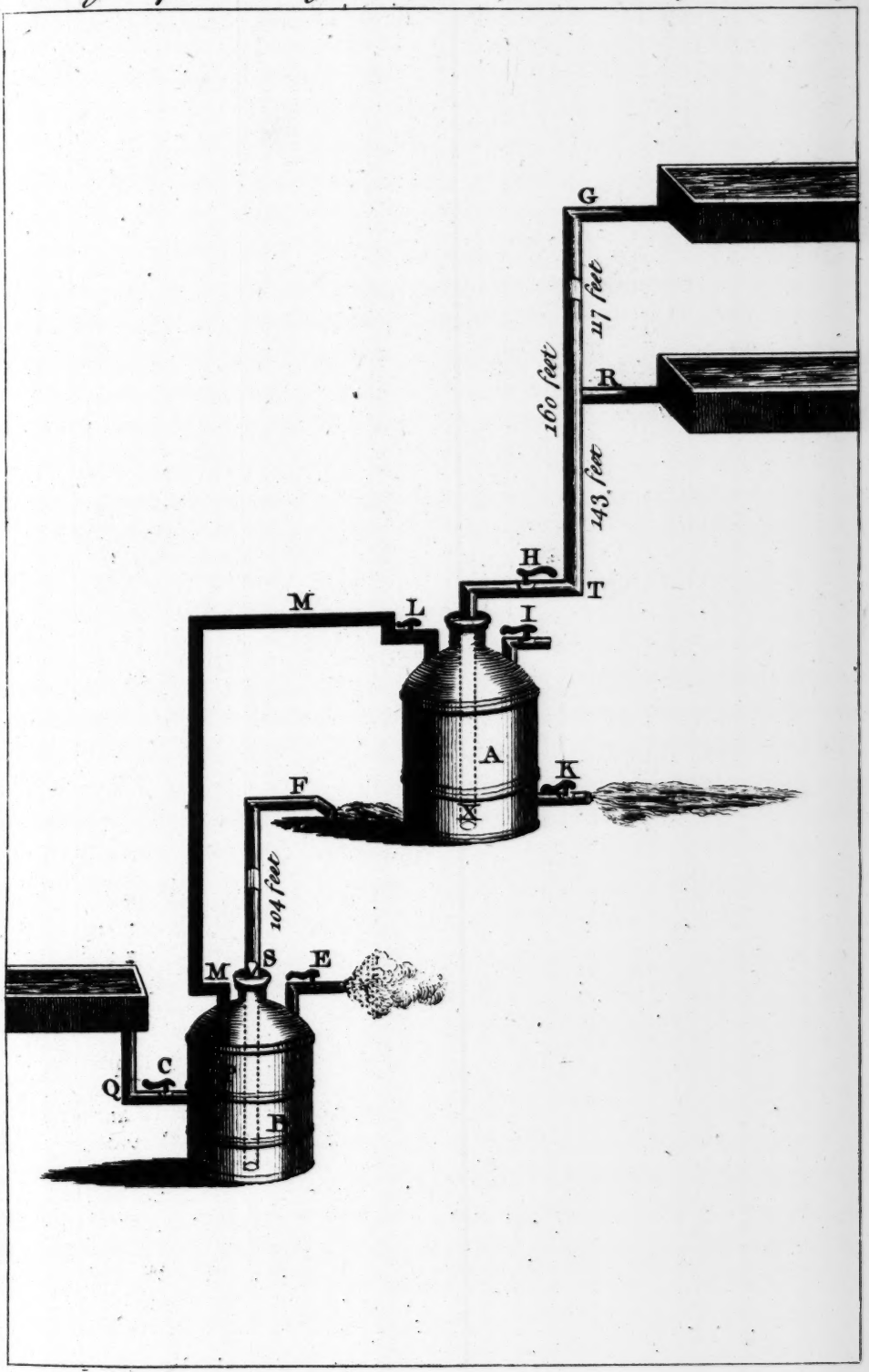
The little Pipe E and its Turn-cock muſt be left open whilſt the Water is running out of the Trough D, through the Pipe P C Q, into the Veſſel B. At the Orifice of the little Pipe E, ſnow and ice are generated.

P and S, are Valves, to ſtop air coming out of the Veſſel B, and Water out of the Tube F S.

The Operation is performed thus,

Two Men are placed at the Veſſels, and all the Turn-cocks being ſhut, and the Water let into the Pipes R T, or G T, to a ſufficient quantity from the Trough N, or O; the Turn-cocks C and E of the lower Veſſel B, are firſt opened, and that Veſſel is filled quite full with Water from the Trough D. Then the Turn-cocks C and E are ſhut, and thoſe at H and L are opened, ſo that the Water flowing through H X, the Veſſel A is gradually filled, and the compreſſed Air is forced through L M M into the lower Veſſel, and the Water begins to flow out through F, the Veſſel A being ſcarce half full. The Veſſel

The Engine for Raising Water out of the Mines of Chremnitz.



For the General Magazine.

B being thus nearly emptied, H is ſhut, and, upon opening K and I, great part of the Water is diſcharged from A. Then K and I are ſhut, and, if it be thought proper, L is opened; upon which the Air with a ſtrong noiſe, returns into the Veſſel A. Laſtly, I being ſhut, the operation is over, and may be repeated at pleaſure.

When the operation is carried on by the Water from the Trough N, which abounds with ſaline, nitrous, and ſulphureous Particles, if in the preceding Operation the air was returned into the Veſſel A, by opening the Turn-cock L; and the operation commencing a new upon opening C and E, a Subſtance like Snow is always generated at the Orifice of the ſmall Pipe E, which may be collected in a Hat. But if at the End of the laſt Operation L was not opened, but the Air remained in a State of Compreſſion, and upon opening C and I, a Hat be held at E, inſtead of Snow, ſolid thick Ice will be found in it. But neither of theſe happen, when the Machine is worked by the Rain-water from the Trough O.

The Dimenſions of the Parts are as follows:

The Diameter of the Veſſel A 32 ½ Inches, its Height 60 Inches, its Thickneſs 1 ¼ Inch.

The Iron Pipe R T 143 Feet, G T 260 Feet. Diameter 4 ½ Inches, Thickneſs 1 ¼ Inch.

F S Q 104 Feet, Diameter 3 ½ Inches.

L M M is formed narrower towards the Bottom. Its upper Diameter 2 Inches, its lower 1 Inch, Thickneſs 1 ¼ Inch.

The Chremnitz to the Paris foot is as 1538 to 1440; the Pound as 106 to 92. The Paris Foot to the Engliſh as 114 to 107.

A cubic foot of Water of the Mine weighs 72 Pounds.

The Veſſel A contains 57 ½ Cubic Feet, B 27 ½.

25 Cubic Feet are raiſed at every Operation, ſometimes 31 ½ Feet, as the Water deſcends from N or O, the times being different: For in one Caſe 20 or 21 Draughts are made in an hour, in the other only 17 or 18.

Such is the Deſcription that Father Hell gives of the Machine erected under his own Direction.

If the Veſſel A were emptied after each Operation, the Expence of water in one Caſe would be 1178,25 Cubic Feet in an Hour, and the Effect 563,75; in the other Caſe 1006,25 Cubic Feet, and the Effect 481,25. But, as it is not neceſſary that the Veſſel A ſhould be much more than half emptied, the Expence of Water will be nearly equal to, or will not much exceed the Quantity raiſed.

It ſhould follow from Experiments of the Aerometer, that the Column F Q is counterpoiſed by the compreſſed Air, in the inverſe ratio of 104 to 32; hence the Volume of Air contained in the Veſſel A and the Pipe L M M, equal to 58 ½ Cubic Feet, muſt be reduced to 18 Cubic Feet, before the Air can be raiſed to F; and by increaſing the Compreſſion a little, be made to flow out through F.

If at the Moment that the Veſſel A is full, the Turn-cock H be ſhut, the Water will continue to flow through F, until the Air occupies 18 Feet in the Veſſel B, and in the Pipe L M M. And then Air is *in æquilibrio* with the Column F Q and the effiux of the Water through F ceaſes.

Wherefore not above 17 Cubic Feet of Water are evacuated at each Draught, and 10 ½ Cubic Feet are conſtantly left in the Veſſel B.

But if H be not ſhut the very Moment that the Veſſel A is full, the Water in A follows the Air

through L M M, and before it gets to the Veſſel B, will yet raiſe one cubic Foot more; but after it is got into the Veſſel B, it will not then diſcharge the Water of B, but its own Water through F, by a uſeleſs Circuit, till H be ſhut, which being done, the water will continue to flow, even to the Remainder of 10 ½ cubic Feet: And the Moment of time when the Water of A deſcends into the Veſſel under it, may eaſily be known by the velocity of the Efflux at F ſuddenly becoming three times greater.

That this is actually the Caſe, is manifeſt from hence, that ſometimes 31 ½ cubic Feet are diſcharged, which quantity exceeds the Capacity of the Veſſel B by more than four cubic Feet.

This inconvenience might eaſily have been prevented by giving to the Pipe S the Diameter of 18 Inches. For then there would have remained only the juſt ſpace of 18 cubic Feet for the compreſſed Air.

The Power of the Column R T is equal to the Weight of 1908 cubic Feet; and would compreſs the Air into a fourth, and when the Water is deſcending into the lower Veſſel, into a ſeventh Part of its natural ſpace, if it were equally reſiſted at F. The Veſſel A is filled at a mean Celerity in 8 Seconds; in double which time 17 cubic Feet are evacuated through F.

The Power of a Column of 260 Feet is equivalent to the Weight of 3470 cubic Feet of Water; therefore it can raiſe that quantity, if the Veſſel B be ſo conſtructed, as to allow no more than a juſt ſpace to the compreſſed Air. If the Veſſel A were filled in 4 Seconds, then 17 cubic Feet of Water would be diſcharged through F in twice that time: and the Air would be reduced into an eighth, and during the deſcent of the Water of the Veſſel A into that under it, into an eleventh part of its Bulk. But this makes no Alteration as to the Quantity of the Effect; and when water ceaſes to flow out at F there will always remain 10 ½ cubic Feet of Water in the Veſſel B.

From what has been ſaid it is evident that this Engine, though it anſwers the Author's Intention, is ſo deficient as to the Effect it might produce, as to bear ſcarce any proportion to the Power: And Hiero's fountain is in theſe our days unworthily confined to the Diverſions of School-boys, when the ſmall ſprings abounding about moſt Mines might be collected in more than a requiſite quantity to work ſuch an Engine, though quite inſufficient for any other.

The wonderful Generation of Snow and Ice at the Orifice of the Pipe E, during the time the Engine is worked by the ſaline, nitrous and ſulphureous Water of the Trough N, proves, like other artificial Ice, that ſalts accelerate Congelation: Otherwiſe the Rain-water of the Trough O, or eſpecially the Water of the Mine in the Trough D, as being much colder than that of N, would doubtleſs have produced the ſame Effect. The *Rationale* of this property of the ſalts can ſcarce be conceived to ariſe from any thing but their denſities greatly exceeding the denſity of water, and the rectilinear figure, particularly of ſpiculated Nitre, and Salt-ammoniac; which as they are not diſpoſed to Motion, do retard the Motion of Heat, and tend to reduce, in ſome Meaſure, to reſt, the particles which are already in Motion; and when diſſolved in water do infinitely increaſe the number of points of contact: whence, by an univerſal Law they produce coheſions. For all other Bodies denſer than Water, do ſo in proportion to their ſurfaces conti-

ontiguous to the Water, though in a far leſs degree than ſalts, becauſe being indiſſoluble in Water, their external ſuperficies can only be in contact with it: However they bring on the congelation a conſiderable time before the water, or even the Atmoſphere has parted with its heat to the Degree of Freezing. This is confirmed by the Dirt in the Streets, Hoar-froſt, and the configurations on Glaſs Windows; and it is obſervable that ice begins firſt to be formed cloſe to the Shore or the Side of Veſſels. In producing artificial Ice a Veſſel of a large Surface is likewiſe neceſſary, and the Experiment ſucceeds better in a Pewter diſh, than in one of Glaſs.

But if the warmth of the water be conſiderably above the Term of Freezing, the formation of Ice ſeldom ſucceeds; and it will be found neceſſary actually to eliminate part of the heat, either by the application of a colder body, or by a Blaſt of Wind. Hence artificial Ice is rarely ever produced, unleſs Snow or Ice be placed under the Veſſel. Nature removes Heat by Wind, as the Viciſſitudes of the Seaſons ſhews us. The Æolipile expires a cool blaſt, Broths are cooled by blowing, wet Ropes and Linen are ſoon dried by Wind; and in ſummer time, the clouds being haſtily deprived of their Warmth by the Winds, concrete into Hail. A very hot Wind is ever the Fore-runner of a ſudden tempeſtuous Storm, and as cold a Wind inſtantly brings on the Hail. Wind indeed is a conſtant Concomitant of Hail, and the largeſt ſized Hail-ſtones never fall but in the hotteſt Summers, and with the moſt boiſterous and ſudden Winds: For the more intenſe the Heat, the more ſlowly is it diſſipated, and the more violent the Wind, the abler is it to ſuſpend the Hail-ſtones in the Airy Region, whence by their innumerable Colliſions with one another they coaleſce into ſuch monſtrous ſizes.

But remark withal, that Snow, Hoar-froſt, and icy Configurations require a ſtate of Reſt, and that Winds will diſconcert the Delicacy of their Forms. Theſe imply an Admixture of Salt, which though diffuſed in an inſenſible Quantity amidſt the Water, yet in conſequence of its Penderoſity and Liſtleſſneſs to Motion, ſettles ſooner to reſt than Water, and fixes that Fluid into its own natural State. We have occular Demonſtration of this Fact in thoſe admirable ſaline and metalline Configurations which the incomparable Mr. *Baker* has diſcovered by an Artifice of his own Invention, and moſt elegantly delineated. Now can any Naturaliſts conceive, that the difference of ſuch Configurations in Snow, Hoar-froſt, and the Incruſtations upon Glaſs Windows, ſhould be aſcribed to any Cauſe beſides their different Quantities of Salts. The Chemiſts aſſert, that ſuch ſaline Cryſtals are no other than a Combination of a great deal of Water with a very ſmall Quantity of Salt, concreted, by Reſt, into a Form appropriate to ſuch and ſuch a Salt. This will account for the Formation of Hoar-froſt, anterior to the abatement of Warmth down to the Term of Congelation, ſuch formation being aſſiſted by an admixture of Salt, and an Increaſe of the Surface to which it adheres; it will likewiſe account for the formation of Snow both before, and at that Term, it being aſſiſted by Salt alone: alſo why in an intenſe degree of cold Snow falls not in bloſſoms, but like a duſt, namely from being congealed before the contact, ſo as not poſſibly to adhere together. Laſtly, this ſhews why under a moderate degree of cold, accompanied with Wind, no Snow is produced, but only a looſe kind of Hail; but with

a ſharper cold conjoined with Wind a ſmall, hard, cutting hail is generated.

In our Phenomenon, the water of the Trough N, being cool, and replete with ſaline particles, and in continual contact with ſo great a length of metal Pipes, being reſolved into dew, is more diſpoſed to freezing than in the experiment of artificial Ice; ſo that at the end of the operation it wants nothing but reſt to become ſnow, or the ſurface of a hat to be changed into hoar-froſt. But if after the operation the Turn-cock L be not opened, but the air remains in a ſtate of compreſſion, then upon opening C and E, a wind burſts out at E with a velocity of 78 feet in one ſecond of time. Whereupon the dew, nearly upon the point of congealing, is converted into Hail, and at the ſurface of a hat, into Ice: Now Hail differs from Ice, only in the roundneſs of its Figure; acquired by frequent colliſions, being ſometimes intermixed with Snow.

This old Theory of Congelation ſeems to me abundantly ſufficient for explaining all the recited phenomena, without having recourſe to Electricity or any other new Principle.

Uſeful Hints and Obſervations for the Improvement of Agriculture, &c.
Continued from Page 284.

Some cautions with regard to the management of corn whilſt it ſtands in the field.

IF the wheat be fully ripe when cutten, and not full of graſs or weeds, it will require very little field-room, eſpecially if it be put into a barn, and that have proper air-holes; ſo that the firſt caution ſhould be, to ſtack wheat as ſoon as ever it can be ſtacked with ſafety.

The ſecond caution may be, to leave the *cap* or *top* ſheaves, to receive the benefit of the ſun and air all the day, while we lead the reſt to the barn or ſtack.

The third is, if the weather has been very wet, whilſt the corn had field-room, to looſe the bands of ſuch ſheaves as have received moſt damage, eſpecially of the cap ſheaves, and open them to the ſun and air before they be led. By this means, with a little trouble, the leaſt dry may be ſeparated from the better corn, and ſtacked by itſelf.

The feeding of ſheep in ſpring on the fields of wheat is conſidered by many ſenſible farmers as a *problematical practice*, which can be rightly determined only by an accurate examination of all circumſtances.

If the wheat be not luxuriant, or not well rooted; if the ſheep be turned on to it in too great numbers, or ſuffered to ſtay too long; if dry weather for a conſiderable time ſucceed the feeding, the crop may ſuffer greatly, and in contrary circumſtances may be benefited by the ſheep, eſpecially as their feet will ſettle the clods, if crumbly, about the roots, and their dung, urine, and even lying, warm and enrich the ſoil.

Sowing of much ſeed on wheat land is a very general fault of farmers, and their notion that this thick ſowing prevents the weeds, often a great miſtake. The thicker the young plants are, the weaker, and the more power the weeds will have to over-top the corn.

A plant of wheat require ſo much nouriſhment to fill well all the ears which may ſpring from it, that it demands a conſiderable circumference of ſoil for its ſupport; and weeds may be probably prevented by

by good tillage before the ſowing, or, at leaſt, by care afterwards.

A ſtory of the uſefulneſs of pidgeons, not only by their dung, but even by their devouring faculty, to produce a good wheat crop in ſome places.

About forty years ago a gentleman coming to Tuxford, in Nottinghamſhire, in his way to, or from, London, aſked the maſter of the inn if he had not a pidgeon-pye, as uſual in that ſeaſon; Tuxford being as famous for pidgeons as for a ſtrong clay, and its produce, wheat. The landlord anſwered, that the farmers being perſuaded that every pidgeon eats a load of corn in a year, had agreed to deſtroy their *courts*. "But, added he, we find, that without pidgeons we can grow no corn, and muſt re-people our *courts* with all poſſible expedition." The gentleman being curious to know the reaſon, the landlord continued, "Our ſoil is ſo full of the ſeeds of *ketlocks*, that they now over-ſhoot and deſtroy our corn, and we find by experience that our pidgeons preferred theſe ſeeds to any corn whatever; and that in deſtroying of our pidgeons we have run a great riſque to deſtroy ourſelves."

'Tis highly probable, that the ſeeds of many other weeds are in like manner preferred by pidgeons to any corn, juſt as cats prefer the fleſh of mice to any other, and that in many places we ſhould have much better crops of wheat, &c. if we encouraged pidgeons more.

It is worth the while to try in what degree pigeons are fond of ſeveral ſeeds of weeds; and in particular, how they ſtand affected to the ſeed of *mellilot*, which gives ſo diſagreeable a taſte to the fineſt wheat, as to render it in a manner uneatable, at the ſame time that it is ſo ſmall as ſcarcely to be ſeparated from the corn.

Obſervations on ſome premiums propoſed by the Society for Encouragement of Arts, &c.

A circumſtance of one of the newly propoſed premiums, which ſeems to want amendment, is the ſmallneſs of thoſe aſſigned to the gathering of graſs-ſeeds by hand.

The value of the time to be employed in gathering of them in ſo throng a ſeaſon as the ſummer, is very conſiderable; and the harm which will be done to the meadows by people's treading of them, in order to gather the ſeeds, is ſtill more ſo. The quantity to be gathered is large, viz. fifteen and twenty pounds weight of ſome of them; and thoſe, of which ſmaller quantities are required, are, in proportion at leaſt, ſcarcer.

The quantities, how large ſoever, which are gathered, are to be produced to the ſociety, no certificates of the reality of the quantity being admitted. Now the expence of carrying up, and bringing down, for the gatherer's uſe, and attendance on the ſociety, is not inconſiderable; and after all, what is the worſt circumſtance, and ſeems leaſt reconcileable with ſuch a generous ſpirit as ſhould actuate the ſociety, every ſucceſsful candidate, however expenſive his collection, muſt leave the quantity of ſeeds ſtipulated to entitle him to become a candidate, the fruit of his labours, &c. for the emolument of the members of the ſociety.

As the ſeveral ſorts of ſeeds to be gathered in one meadow may reaſonably be ſuppoſed to be ripe at very different times, not one trampling of the meadow will ſuffice, but ſeveral muſt be ſubmitted to; and therefore the emolument ſhould be proportionably greater.

In order to be entitled to the premium, the ſeed muſt be gather:d by

by hand, not only *clean*, but *ripe* and *perfect*. Now it is ſo very nice a matter to determine when a ſeed is *ripe* and *perfect*, that a man's diligence and expence may be diſappointed of their reward by captious judges rejecting ſeeds as not perfectly ripe, &c. which nicety may bring his collection below the ſtandard required. It is obviouſly, a work of nicety to diſtinguiſh the ſeveral ſorts of graſſes by help of the beſt *deſcriptions* and *drawings* which can be had (and theſe cannot be had without conſiderable expence); and as to the original graſſes bearing ſeed, though they may be ſeen at the ſociety's room in the Strand, yet how few, who would become candidates, can go thither to ſee them? Specimens ſurely ſhould have been ſent to the principal parts of the kingdom to be inſpected by ſuch as would become gatherers of the ſeeds. From all theſe conſiderations it ſeems evident, that few perſons are qualified to become candidates for theſe premiums, and therefore the premiums ſhould have been advanced much higher than the preſent ten pounds. A man qualified to gather theſe ſeeds required, muſt go into the meadows of others as well as his own, and he ſhould be enabled to pay for the neceſſary damage he does.

It is therefore feared, that the time limited for delivery of accounts of the beſt methods of cultivating wheat, rye, &c. is alſo much too ſhort, as experiments are to be made in the different ways of broad-caſt and drill; and the knowledge being acquired, the inſtruments of the new huſbandry are not inſtantly to be gotten, and fields cannot be diſpoſed for the different experiments in a moment; yet muſt that wheat and rye be ſown in a few months, of the proof of which an account is to be given in November, 1765.

It may not be improper to mention one remarkable premium never yet determined, (ſo far as the public knows) which ſeems to have failed of the propoſed ſucceſs merely for *want of time*.

An advertiſement was publiſhed in May or June, ſome years ago, that the ſociety would give a golden medal to the author of the beſt hiſtory of the *riſe* and *progreſs of Agriculture, manufactures*, and *commerce*, in *Great-Britain*. What time was required to turn over printed books, ſearch records, liſten to experiments, reflect on things, methodize materials, and form them into a connected hiſtory! Yet this hiſtory was to be delivered to the ſociety at the end of the ſame ſummer. One would have been apt to conclude, that this premium was deſigned for ſome *favourite* member, who had his hiſtory *ready cut and dried*. But yet no ſuch thing appears. I am afraid, on good credit, that one candidate, (who had laboured as hard as it was poſſible) together with his *hiſtory* which he modeſtly called a *ſketch*, ſent to the ſociety a repreſentation of the impoſſibility of producing an hiſtory in the time prefixed, and deſired his own papers might be ſent to an eminent bookſeller in *London*, that he might perfect them, being his only copy, but could never recover them, though he knows not by whoſe fault.

On the culture of potatoes, and Magazan beans.

The Iriſh purple is the beſt and ſweeteſt ſort, and forwardeſt; the middling ſize and brighteſt, the beſt ſeed, ſet whole.

Set ſome in February, March, April, in a fine deep tilth, in any ſoil: in froſt cover the firſt ſetting with litter or fern.

Set them ſix inches deep, in a kind of hillock, or like a mole-caſt: *(Mark this)*—They are now out of the

the ground, therefore it is too late to ſow them. But obſerve this method: carefully mould them up every month or fortnight, and there will be near a buſhel under your hillock by July or Auguſt: be ſtill moulding up as high as you can; therefore ſet your ſeed at firſt a yard diſtant ſquare. The authors of the Complete Body of Huſbandry knew not this method, and the Complete Body of Gardening takes no notice of this valuable root.

Mr. Millar is full, but wrong.

The white kidney ſort, in looſe ground, will run all into ſtringy roots; the pink-coloured forward ſort will do very well, ſown in the former manner; and the ſmalleſt potatoes are good ſeed, but theſe are often thrown to hogs.

Now the magazan bean, for man or horſe, is as ſweet as the Windſor.

Set ſome the latter end of November, and ſome in December, in loamy ground, in rows near a yard diſtant, pretty thick and deepiſh (four inches). In froſt cover the rows with dung.

In January, February and March, ſet ſome more, as before, but not ſo thick. (*Keep cats in you Garden*) When your rows are too thin, plant ſome out of your thick rows; all to be four inches diſtant: mould them up, and uſe the Dutch hoe all the ſummer.

Now you will ſee the excellence of this bean. In the beginning of May your firſt-ſown will bloſſom, though but half a foot high, and begin to bloſſom from the very bottom to the top, and ſo on, as they riſe to a yard high; but they will be ſtrong, and ſend three or four from one root: but be ſure never top them; it will make the kids and beans ſmall, though perhaps more in number; it is a bad way.

See the preference of this to the horſe-bean: it runs all into ſtraw in compariſon, and is apt to break and blow down.

The former beans at harveſt ſhould be pulled as they ripen, if only few were ſown, or, if many, the ſtalks pulled up and ſet upright to dry: when dry, they may be ſplit for horſes; or for hogs they are excellent.

On the benefit of ſpending turneps whilſt they are young.

One acre of young turneps is of more value for fattening ſheep than two acres of old ones, as the wethers you turn in will get fleſh and fat at leaſt as faſt again on the firſt as the laſt.

Let this maxim be treaſured up in the farmer's memory; and let him not at any rate be tempted, for the ſake of ſpending a few weeds and graſs on his fallows, to keep his turneps till they are of little worth.

If any of your readers ſhould be incredulous, let them try the experiment; it will be but little expence, and ſtill leſs trouble. I did ſo myſelf before I adopted the practice, and was in a very ſhort time convinced: this happened ſome years ago, and I have continued this method ever ſince.

Hints for removing the great evil occaſioned by the dearneſs of proviſions.

I remember an honeſt farmer in Wiltſhire, who, ſome years ago, when mutton was very dear, as it is now, was told, that if he would ſend ſome wethers up to London they would fetch a high price, for that they ſold at four-pence per pound by the carcaſe.

Accordingly, our farmer ſent up two hundred fine ſheep, of a proper age, and in fine order. The conſequence was, they were, through a combination among the dealers, two market days expoſed in Smithfield without being ſold, and the third day were ſold at the rate of ſome-

ſomething under two-pence per pound to a carcaſe butcher, who, within the week, killed them, and ſold to the retailers at four-pence per pound, or very little under that price.

The farmer was, you may imagine, greatly chagrined, as he could have ſold them for more at home, and have ſaved the expence of bringing them to London. He determined within himſelf to trouble Smithfield no more with his company, but ſell his ſheep at home, as his neighbours did theirs.

This was what the dealers aimed at, thinking, that by coming up to London with his ſheep he encroached on their province; it was, therefore, their intention to *ſicken him*, as they called it, and thereby induce him the more readily for the future to ſell his ſheep to their out-riders.

This inſtance of the great power and influence of the Smithfield dealers, is one amongſt many others which I could enumerate; but it is to little purpoſe to repeat grievances, unleſs we, at the ſame time attempt a remedy.

When the committee of the houſe of commons ſit next on this buſineſs, I could wiſh them to take into their conſideration the means of preventing the markets from being foreſtalled.

It is well known, that a very great number of beaſts are every week bought up, by out-riders, as they are driving to market. It is alſo as well known, that Smithfield is, by the practices of the great dealers, but barely ſupplied with cattle for the conſumption of the metropolis and its environs from market-day to market-day. Alſo great numbers of beaſts are brought to market, and afterwards driven back to the fields about Iſlington, &c. unſold.

Now I would recommend it to our law-makers, that no man ſhould be left at liberty to buy cattle as they were driving to market within twenty miles of London. That if any cattle were bought on the road to London, at any diſtance beyond twenty-miles, ſuch buyer ſhould give ſecurity, before the next juſtice of the peace, that he would either kill it within a week, and within ten miles diſtance of the place where he bought it, or that he would not ſell it alive within ſix months of the time he purchaſed it.

That no cattle ſhould be ſold in London, or within five miles of it, for ſlaughter, in Smithfield only excepted.

That oxen, cows, calves, ſheep, lambs, and hogs, ſold in Smithfield for ſlaughter, ſhould not be afterwards ſold alive to any perſon whatever.

That cattle, which were brought to Smithfield market, and driven away unſold, ſhould pay the following tolls, viz. For every ox ten ſhillings, every cow ſeven ſhillings, every calf five ſhillings, every ſheep four ſhillings, lambs two ſhillings and ſixpence each, and each hog or pig three ſhillings; the produce of this toll to be applied to the relief of poor confined debtors; ſeveral of which debtors, upon giving proper ſecurity, ſhould be permitted to collect the ſame. This toll would induce the owners to ſell them for ſlaughter, if they poſſibly could.

That no cattle, horſes excepted, ſhould be ſold in Smithfield but for immediate ſlaughter, as every butcher ſhould be obliged to engage to ſlay what he bought, within a week, at moſt, of the time of purchaſing.

That all cattle, coming up to Smithfield market, ſhould be exempted from paying any toll at the ſeveral turnpike-gates. This is the

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That no cattle ſhould be ſold in Smithfield market after ten in the morning. This would be replete with many advantages; and ſeveral lives would every year be ſaved by it.

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After the proclamation of the peace, many flattered themſelves with the hope of ſeeing its general concomitant, plenty; but it is a ſorrowful truth, that the reverſe has been the caſe, as almoſt every thing is become dearer ſince the concluſion of the war.

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A fat capon	0	2½
A gooſe	0	4
A mallard	0	1½
A partrigde	0	1½
A pheaſant	0	4
A heron	0	6
A plover	0	1
A ſwan	3	0
A crane	1	0
Two woodcocks	0	1½
A fat lamb, from Chriſtmas to Shrovetide	1	4
And all the year after	0	4

And wheat was this year ſo plentiful, that a quarter was ſold for ten groats.

The price of many neceſſary articles in the reign of Henry VI. *Extracted from the appendix to Mr. Thomas Hearne's Edition of the* Liber niger *Scacarii.*

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hith, who had two ſhillings threepence a-piece, beſides their diet and horſe-meat. This was in the reign of Henry 6. Obſerve, that in thoſe days they paid their minſtrels better than they're prieſts. They're feaſt they kept yearely on the invention of the holy croſſe, *viz.* the third of May. They had at their feaſt ſix calves, jjs. a-piece; ſixteen lambs, xiid. a-piece; 80 capons, iiid. a-piece; 80 geeſe, iid. ob. a-piece; 800 eggs, which coſt fivepence the hundred; and many marybones; much fruit, ſpice, a great quantity of milk, cream, and flour. Wheat was then xiid the quarter, in the 23d of H. 6. Beſides what their ſervants, and others, brought in, and pageants, and plays, and May-games, to captivate the ſcenes of the zealous beholders, and to allure the people to the greater liberality; for they did not make their feaſts without profit; for thoſe that ſat at dyner payd one rate, and thoſe that ſtood pay'd another."

An efficacious Receipt for deſtroying Bugs, by an eminent Phyſician.

A phyſician communicates this well-experienced receipt for the deſtroying of bugs, with which he entirely cleared his own beds, &c. many years ago, and has told it ſcores of families ſince, who have all found the ſame effects by it, and never ſaw a bug afterwards.

Take of the higheſt rectified ſpirit of wine, (*viz.* lamp ſpirits) that will burn all away dry, and leave not the leaſt moiſture behind, half a pint; newly diſtilled oil, or ſpirit of turpentine, half a pint: mix them together, and break into it, in ſmall bits, half an ounce of camphire, which will diſſolve in it in a few minutes: ſhake them well together, and with a piece of ſpunge, or a bruſh dipped in ſome of it, wet very well the bed or furniture wherein thoſe vermin harbour and breed; and it will infallibly kill and deſtroy both them and their nits, although they ſwarm ever ſo much: but then the bed or furniture muſt be well and thoroughly wet with it, (the duſt upon them being firſt bruſhed and ſhook off) by which means it will neither ſtain, ſoil, nor in the leaſt hurt the fineſt ſilk or damaſk bed. The quantity here ordered of this curious neat white mixture, (which coſts little above a ſhilling,) will rid any one bed whatſoever, though it ſwarms with bugs. Do but touch a live bug with a drop of it, and you will find it to die inſtantly. If any bug or bugs ſhould happen to appear after once uſing it, it will only be for want of well wetting the lacing, &c. of the bed, or the foldings of the linings or curtains near the rings, or the joints and holes in and about the bed or head-board, wherein the bugs and nits neſtle and breed; and then their being all well wet again with more of the ſame mixture, which dries in as faſt as you uſe it, pouring ſome of it into the joints and holes where the ſpunge or bruſh cannot reach, will never fail abſolutely to deſtroy them all. Some beds that have much wood-work, can hardly be thoroughly cleared, without being firſt taken down; but others that can be drawn out, or that you can get well behind, to be done as it ſhould be, may.

Note, The ſmell this mixture occaſions, will be all gone in two or three days, which is yet very wholeſome, and to many people agreeable. You muſt remember always to ſhake the mixture together very well, whenever you uſe it, which muſt be in the day-time, not by candle-light, leſt the ſubtle effluvia of the mixture ſhould catch the flame as you are uſing it, and occaſion damage.

A

A Deſcription of an Inſtrument for making Drains.

This ſimple, but uſeful, inſtrument for draining wet land, which we call *a guttering*, or *draining plough*, is worked by one man only: it is preferable to that plough drawn by horſes, for ſeveral reaſons; as in wet land (which is the land that wants draining) the horſes tread too much, and are more chargeable than this worked by one man, though perhaps that may make a deeper drain; but this will make one of ſix or eight inches deep. It is uſed much for draining of bleaching-grounds in this part of the country, and may do very well for wet clay meadow-land, where the ſoil is but ebb, and apt to put up a large quantity of ruſhes, as much of the meadow-land with us is apt to do after ſuch a wet winter as the laſt has proved.

In flat clay meadow-land, if a drain of four or five inches broad, and ſix or eight inches deep, be made between every land, and the clods gathered in heaps, and mixed with lime or dung, or both, to ferment together, it affords a good quantity of manure to be laid upon the land, when well rotted, and is very ſerviceable for preventing the ruſhes from getting ſuch a head as they are apt to do in our wet land; but I do not find that it will effectually kill them.

Whether this method be univerſally practiſed, or not, I know not; but this I know, it has not been long in uſe with us in this part of the country; but, from its great utility, it ought to be publicly known and practiſed in wet land: and if any of your correſpondents, where the practice has been of longer uſe with them, will favour us with any improvements upon ſo uſeful an inſtrument, or the manner of working it, it will be very agreeable to many of your readers.

Gorton, near Mancheſter,
June 1, 1764.

Explanation of the Figure.

A, the point.

E, B, the right-hand ſide.

F, C, the left-hand ſide. Theſe ſides are perpendicular, or upright,

eight inches high, or more, or leſs, as you pleaſe; the fore-edge inclining backward, which is made ſharp for cutting, as likewiſe the point A. The diſtance between the two ſides four or five inches, the width you would have the drain, or gutter, to be made.

D, ſhews where the ſtale goes into the ſocket: there is here a ſmall wedge on the under ſide to ſet it higher or lower, when it is worked with. From F to G, a rib is faſtened, as alſo one on the other ſide, to make it the breadth of the mouth, that the clod may lie upon it till it is ready to turn off.

H, a ſtrong peg about a foot long, and two inches diameter, faſtened to the ſide of the ſtale with ſcrews: this peg reſteth upon the land when the clod is to be turned out of the mouth.

I, K, a croſs piece three feet long for handles, and to puſh with, or againſt, when it is at work.

To the Editor of the GENERAL MAGAZINE *of Arts and Sciences.*

SIR,

SOME imperfect accounts having already appeared in the Newspapers about the Reſult of the Trials of Mr. *Harriſon*'s Longitude Time-keeper, in a late Voyage to *Barbadoes*, and it being probable that more of the like kind may ſucceed; it has been thought proper, in ſome meaſure, to ſatisfy the impatience of the Public, till a board of Longitude ſhall be held, and the Deciſion of the Honourable Commiſſioners fixed upon this Occaſion, to publiſh the following authentic and plain Narrative of ſome Experiments; which though they do not, any of them, fall under the Notice of the Commiſſioners, as they were not enjoined to be made by them, may yet ſerve as collateral Proofs of the Going of the Time-keeper, and how far it is likely to ſucceed in the ſolution of the Grand Problem of the Longitude.

In the Month of *December*, 1763, Mr. *John Harriſon*, by written invitations, prevailed on twelve Gentlemen of unqueſtionable Abilities and Integrity, to meet daily at his houſe in *Red-Lion-Square*, to examine and witneſs to the going of his Time-piece, (ſoon to be ſent to *America* on trial for the Longitude) in ſuch manner as they ſhould deem moſt ſatisfactory among themſelves. And accordingly they agreed that the ſaid Machine ſhould be, every morning, compared with a Regulator in the ſame houſe, which upon thirty years Trial had ſeldom been known to vary from the rate of Mean Solar Time, more than about one Second in a Month; and that the going of the ſaid Regulator itſelf ſhould, at the ſame time, be aſcertained by means of an accurate Inſtrument for obſerving the Sun's Tranſit on the Meridian, likewiſe in the ſame houſe, as often as the weather would permit,

In conſequence of this agreement, the Time-keeper was compared with the Regulator for eight ſucceſſive days; and immediately after each compariſon was wound up, and then locked up in a box, ſealed with as many of the companies Seals as they choſe to affix; the Regulator being alſo ſealed up in like manner.

The reſult of all theſe compariſons was, that the Time-piece gained upon the Regulator, for the moſt part, about one Second a day, and ſometimes a ſmall matter more; it having, on the laſt compariſon, been found to have gained nine Seconds, and ſix tenths of a Second, in the eight days.

After

After theſe trials Mr. *Harriſon* took his Time-keeper aſunder, in order to give a greater degree of perfection to that part of it which was to counter-balance and regulate thoſe ſmall inequalities which might ariſe from the various temperature of the air, with regard to Heat and Cold: But he had not time to execute his intention in that reſpect, before a ſhip was appointed to take the Time-piece on board, and proceed for the Iſland of *Barbadoes*, upon the ultimate Trial for the Longitude.

Mr. *William Harriſon*, the ſon, beeing ordered, with the Time-piece, on board the *Tartar* Man of War, then lying in *Long Reach*, and commanded by Sir *John Lindſay*, did, at the deſire of Mr. *James Short*, F. R. S. on the 13th of February come to the ſaid Mr. *Short*'s houſe in *Surry-Street* in the *Strand*, and there compared the Time-keeper with Mr. *Short's* Regulator, made by the late Mr. *George Graham*, which was adjuſted to mean ſolar Time by an exact Tranſit Inſtrument; when the Time-piece was found to be two Seconds and a half ſlower than the Mean Time. Immediately after this, Mr. *Harriſon* ſet off in a boat from *Surrey* ſtairs, with the Time-keeper, for *Long Reach*.

The ſhip, according to order, proceeded to *Portſmouth*; from whence after ſome days, Mr. *Harriſon* ſent to Mr. *Short* and others of his Friends, a Declaration in Writing, importing, that he had found by Experiments, that when *Fahrenheit*'s Thermometer ſtands at 42, the Time-keeper gains 3 Seconds in 24 hours; when at 52, it gains 2 Seconds; when at 62, 1 Second, when at 72 it neither gains nor loſes; and when at 82 it loſes 1 Second in a day: however, that he had acquainted the Commiſſioners he was willing to abide by the uniform gain of one ſecond in a day; that nevertheleſs he would not be underſtood, that it will require the like time to bring other future Time-pieces to perfection, as it is eaſy to purſue a road once traced out.

This ſhip ſailed from *Spithead* the 28th of *March* and met with hard and contrary Gales, eſpecially in the *Bay* of *Biſcay*. *April* the 18th they made the Iſland of *Porto Santo*, North Eaſt of the *Madeiras*, as ſet forth in the following certificate of the captain.

Madeira, April 19, 1764.

" *I do hereby certify, that yeſterday* " *at 4 o'clock in the afternoon Mr. Wil-* " *liam Harriſon took two Altitudes of* " *the Sun to aſcertain the difference of* " *Longitude given by the Time-keeper* " *from Portſmouth; according to which* " *Obſervations he declared to me, we* " *were at that time 43 Miles to the* " *Eaſtward of* Porto Santo. *I then* " *ſteered a direct Courſe for it, and at* " *one o'clock this morning we ſaw the* " *Iſland, which exactly agreed with the* " *diſtance mentioned above.*

" *Given under my hand on board* " *his Majeſty's ſhip the* Tartar.

JOHN LINDSAY.

They arrived at *Barbadoes May* the 13th, Mr. *Harriſon* all along in the Voyage declaring how far he was diſtant from that Iſland, according to the beſt ſettled Longitude thereof, as delivered him here. The day before they made it, he declared the Diſtance; and Sir *John* ſailed in conſequence of this Declaration, till eleven at night, which proving dark he thought proper to lay by, Mr. *Harriſon* then declaring they were no more than eight or nine miles from the land, which accordingly at day break they ſaw from that Diſtance.

June the 4th, Mr. *Harriſon* ſet ſail from *Barbadoes* with the Time-keeper, on board the *New Elizabeth*, Captain *Robert Manley*, bound for *London*. On they 12th of *July* Mr. *Harriſon* declared that they were 50 Leagues to the weſtward of the *Lizard*: preſently after

after which they ſpoke an outward bound Brig, which proved to be from *Liverpool*, and had taken her departure from the *Scillys* (reckoned 20 Leagues to the weſtward of the *Lizard*). By the Log the *Tartar* found the run 53 Leagues; whereupon Captain *Manley* declared that the Time-keeper had found the *Lizard* much more exactly, than according to the Brig's reckoning, although they had ſeen the *Scillys* but the evening before.

Capt. *Manley* now made directly for the *Thames*, and he and Mr. *Harriſon* with the Time-keeper arrived at *Surrey* ſtairs, *Wedneſday*, *July* 18th about half after three in the afternoon; when it was found upon comparing the Time-keeper with Mr. *Short*'s clock, examined that day by the Tranſit Inſtrument, that, allowing for the variation of the Thermometer, as ſpecified in Mr. *Harriſon*'s Journal, the Time-keeper differed from the Mean ſolar Time 15 Seconds ſlow: but that without allowing for ſuch variation, and abiding by his declaration of the uniform gain of one Second a-day, it had gained 54 Seconds upon the Mean Time, from its departure from *Surrey-ſtreet*, till its arrival there again at the end of 156 days, or 22 Weeks and 2 Days.

To the AUTHOR *of the* GENERAL MAGAZINE.

IN your magazine for May, p. 221, is an abſtract of the act of parliament paſt laſt ſeſſions for the better regulating of buildings within the weekly bills of mortality; and among other things it is thereby enacted, that from and after the expiration of three calendar months next after the paſſing thereof, all houſes or other buildings, which ſhall be erected within the city of Weſtminſter and limits therein mentioned, ſhall be built of ſtone, or of *good, ſound, hard, well burnt bricks, and none elſe*. In ſome papers notice has been taken of the difference in the quality of thoſe bricks with which London-wall was built, and thoſe of the ſpire of St. James's church, Weſtminſter, the firſt being yet hard, ſound, and firm, after ſtanding ſeveral centuries, whereas the laſt is greatly decayed in leſs than fifty years ſtanding; and that it was obvious to every perſon, from the frequency of houſes tumbling down and giving way, that the bricks with which they are now built are neither of good materials, nor made ſufficient. I have read the act, and ſhould gladly be informed, what is meant by a *ſound, hard, well burnt brick*.

I am no maſter builder, but it is with a view to inform your readers of the preſent method of making bricks, uſed about this metropolis, their ſeveral qualities, and the expence attending, that I give you the trouble of this letter, in hope, it may be of uſe to the public in general, and to thoſe who want to build for their own conveniency in particular.

When a maſter builder or brick-maker leaſes a field for brick, he generally pays at the rate of four pence the ten feet ſquare, and four or five feet deep; according to the ſeaſon he pares the ground or not, and then covers it with aſhes, or what they term *ſoil* collected by the duſt carts in and about the ſtreets of London. If it is a common mild earth, the proportion is two feet of this ſort to three feet of earth, and ſometimes four to five, according as the earth proves ſtrong or not. Theſe aſhes or ſoil are all ſifted, the ſmaller part is that laid on and mixed with the earth, and the cinders is what burns the brick. The expence of ſoil and cinders, ſifting, and ſpreading the former on the ground, is computed to be at the rate of 5d. per hundred brick. That of digging the earth, and mixing it with

with the ſoil, is 1l. 5s. for every 100,000 bricks, reckoning five feet deep, and five feet ſquare for every 1000. The raiſing of ſmall ridges of earth, called hacks, for laying the bricks on after made, is nine pence for every 100 brick length, and three brick long in breadth. The next conſiderable expence is the moulder; he is allowed 12s. for ſettling his ſtool, and 16s. hiring money, to ſelf and crew, which conſiſts of the earth-maker, off-bearer, up-ſtriker, barrow-loader, and ſometimes a work-fitter. Theſe are generally under his direction and pay, and the wages allowed for himſelf and them is 3s. 6d. per 1000. A good moulder and crew will make 20,000 bricks in a week. The expence of Thames ſand is 18d. per load, which will ſerve him for making 15 or 20,000, and that of taking off the hack, putting in the wood frames, and afterwards in the clamp, with all other labour till burnt, is paid to ſettlers or labourers at the rate of 5l. the 100,000. Straw for covering in caſe of rain, and additional freſh coal or faggots for burning, beſides the cinders, may coſt from a penny to two-pence per 1000. This then is the expence of brick-making, the compoſition of which may be reckoned two parts of culm, ſoil, cinder, or aſhes, ſent from the city of London, to three parts of earth mixed therewith.

The clamp being ſo burnt, is then divided in five parts, viz.

The place brick or worſt ſort, many of which will hardly bear their own weight, is ſold at fifteen ſhillings per 1000. The gray ſtock at 20 ſhillings, the beſt grey at 25 ſhillings, the black ſtock at 20 ſhillings, and the beſt brimſtones at 30 ſhillings per thouſand, beſides carriage, which is paid for according to the diſtance carried.

Now I ſhould be glad to know which of theſe, if any of them, is meant to be uſed by the late act in building, under the deſcription of *a ſound, hard, well-burnt brick.*

The red bricks, or as they call them red-rubbers, uſed about doors, windows, cornices, &c. are made in a different manner, all of fine earth, without the mixture of any aſhes, and ſold at the *moderate* price of 3l. the thouſand, beſides their beauty, they will out wear any gray ſtock. Query, Ought not this ſort, be underſtood the only *ſound, hard, well burnt brick?*

The profits are no doubt very conſiderable, which the brick-maker and maſter-builder enjoy. How far then, it ought not to be for the intereſt of the ground land-lord, when he grants a building leaſe, to fix upon and aſcertain the quality of bricks ſuch houſes are to be built with, I ſubmit to thoſe concerned. This would no doubt prevent a great deal of rubbiſh being reared up in buildings upon their eſtates, which often give way, to the prejudice and danger of many of his majeſty's ſubjects.

To conclude, after the firſt of July, 1764, every houſe ſo built is, by the act, appointed to be ſurveyed by one or more ſurveyors, within fourteen days after covered in, who are to make oath before one of his majeſty's juſtices, that the ſame is built agreeable to the ſeveral directions in the act contained, and for fileing this oath, the clerk of the peace is to have one ſhilling and *no more*. Query, How is this ſurveyor's wages to be aſcertained, or by whom determined? It is ſaid of the men of the law, according as they are paid ſo they plead, and perhaps it may happen, according as the ſurveyor is paid, ſo may he certify.

Your's, &c.

To

To the Author of the GENERAL MAGAZINE.

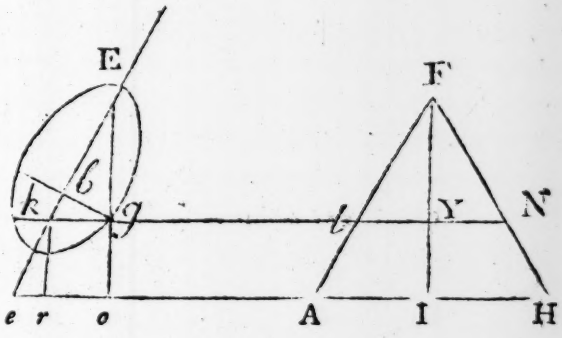
AS I am in a great meaſure an enthuſiaſt in regard to that ſacred paſſion friendſhip, nothing ſooner raiſes my indignation than to hear the name proſtituted upon every trifling occaſion, to the meaneſt and baſeſt ends; the common uſe of which has made it ſo cheap, that it is at length become a worn-out note to carry on the commerce of the world, alike at the Exchange or Newmarket, the Court or the Bear-garden. Men of different ages, rank, and inclinations, indiſcriminately herd together; and the acquaintance of debauchery and folly uſurps the title of friendſhip. But what has given me the moſt concern is, to obſerve, even among the virtuous, a want of judgment in this point, which has often proved very fatal. There are men of the greateſt worth, whoſe actions claim our approbation and eſteem, but whoſe friendſhip, by reaſon of a diſſimilitude of ſentiments, would be neither deſireable nor advantageous. An Indian ſage, giving advice to his ſon on this ſubject, illuſtrated his diſcourſe (according to the Aſiatic manner) with the following ſtory.

Thou haſt heard, my ſon, ſays he, of the great affection lizards have for mankind.—Abairan, the Kaliph of Bagdat, as he was hunting one day in a neighbouring foreſt, being fatigued with the toil of the chace, and ſeparated from his company, laid himſelf down to ſleep on the green bank of a rivulet, which ſeemed to invite him to repoſe with its gentle murmurs. He had ſcarce cloſed his eyes before one of theſe friendly animals awakened him by ſoftly touching him with his tail; but how great was his ſurprize, when he beheld, not many yards off, a large ſerpent rolling toward him? He immediately roſe, took up his little deliverer, and fled. This accident filled his mind with ſo much gratitude, that he daily fed the lizard with his own hand, and cheriſhed it in his boſom. He had not done ſo long before his complexion, which was naturally healthy and florid, became pale and ſickly; his eyes grew dim, his appetite was loſt, and all the ſymptoms of an obſtinate diſorder appeared upon him. The phyſicians, who were immediately called in to his aſſiſtance, employed all their art in vain, the diſtemper increaſed, and the angel of death ſeemed at hand to ſummon him. Whilſt he was in this agony, a ſtranger, at that time in Bagdat, hearing of the kaliph's illneſs, deſired to be permitted to make an experiment. The propoſal was at firſt rejected, and the author looked upon as one of thoſe travelling empiricks that infeſt all great cities. But the ſtranger nevertheleſs perſiſting ſtrongly in his requeſt, and offering to anſwer, with his life, for the ſucceſs of his attempt, the kindred of Abairan ſuffered him to undertake it. Alchaman (for that was his name) no ſooner looked upon the eyes of the kaliph, than he declared that the cauſe of the malady was a lizard, whoſe venemous breath had infected the whole maſs of his blood; and taking a ſmall phial from his pocket, gave the patient a few drops mixed with water to drink. Abairan, as ſoon as he had taken this admirable medicine, found himſelf much eaſier, the delirium left him, his colour returned, and the heat of youth glowed again in his veins. Let it ſuffice that the kaliph, having told the ſtranger how he came by the lizard, and the reaſon of his keeping it, intreated him to make the palace of Bagdat his home; adding, that ſince he had reſtored him to life, he hoped to receive from him the power of enjoying it too, by having that opportunity to ſhew his gratitude, the greateſt pleaſure of which human breaſts are ſuſceptible." To which Alchaman modeſtly replied. "My lord, the pleaſure of doing good is in itſelf a ſufficient reward; for the benevolent have as much ſatisfaction in beſtowing, as the indigent in receiving. If thou haſt found any benefit from my endeavours, all I aſk as a reward is to be permitted quietly to leave thy city, and return to that ſolitude where I converſed with wiſdom and with truth. Thou art a prince, it is true, indued with all ſocial virtues; thy reign is a bleſſing to thy ſervants, and the admiration of thy neighbours; but thy friendſhip is as much to be avoided by me, as courted by the reſt of mankind. Pardon, my lord, the freedom of thy ſervant's mind, the only empire a philoſopher ſhould covet. Friendſhip is founded upon an equality of conditions, and a ſimilitude of deſires; and even virtue, though always neceſſary to cement it, is ineffectual, if this baſis be wanting. Conſider then what a vaſt diſtance there is between thee and me; conſider the inconveniences that muſt accrue to both from ſuch a conjunction. Thou haſt been educated in a palace, I in a cell; the welfare of thouſands depends upon thy care and vigilance as a governor; my ſatisfaction conſiſts alone in retirement and contemplation. Should we live together, thou wouldſt on one hand grow remiſs by attending to my ſpeculations, and I on the other ſhould be diverted from my meditations by the buſineſs which would intrude upon thee. Let us therefore be aſunder, that each may perform, as he ought, the part which providence has aſſigned him to act, and not prove a reciprocal poiſon to each other's mind, as thou and the lizard have been to each other's body.

MATHE-

MATHEMATICAL CORRESPONDENCE.

Queſtion 16, *anſwered by Mr.* T. Todd, *of Weſt-Smithfield.*



AS I cannot ſee the propriety of admitting the properties of this problem to obtain in an ellipſis; I have endeavoured to exhibit the nature of ſuch a curve, in which theſe properties ſhall obtain.

If $x = eb$, $y = gb$ perpendicular to Ee, $b = eI$, $b = AI = IH$, $a = FI$, $p =$ the given line, s and c the ſine and co-ſine of the poſition of Ee with eI; then, by trigonometry, $s : y\ (bg) :: c : kb = \frac{cy}{s}$, $s : y :: \text{rad.} = 1 : kg = ro = \frac{y}{s}$, $\text{rad.} = 1 : x - \frac{cy}{s}\ (ke) :: s : kr = go = YI = sx - cy$, $\text{rad.} = 1 : ke :: c : er = cx - \frac{c^2y}{s}$; hence, $er + ro = eo = cx - \frac{c^2y}{s} + \frac{y}{s} = cx + sy$ (becauſe $\frac{1 - c^2}{s} = s$,) and $Io\ (= eI - eo) = gY = b - cx - sy$, $\overline{og|^2 + oI|^2}^{\frac{1}{2}} = gI$. Again, by ſimilar triangles, $a\ (FI) : b\ (AI) :: a - sx + cy\ (FY) : lY = YN = \frac{b}{a} \times \overline{a - sx + cy}$, and therefore, $Io + lY = gN = b - cx - sy + \frac{b}{a} \times \overline{a - sx + cy}$, $Io - lY = gl = b - cx - sy - \frac{b}{a} \times \overline{a - sx + cy}$; but, by the queſtion, $\overline{gl|^2 + gN|^2} = Ig \times p$; that is, $\overline{\overline{b - cx - sy - \frac{b}{a} \times \overline{a - sx + cy}}|^2 + \overline{\overline{b - cx - sy + \frac{b}{a} \times \overline{a - sx + cy}}|^2} = p \times \overline{\overline{sx - cy}|^2 + \overline{b - cx - sy}|^2}^{\frac{1}{2}}$, which will be more commodiouſly expreſſed by $2.\overline{b - cx - sy}|^2 + 2.\overline{\frac{b}{a} \times \overline{a - sx + cy}}|^2 = p \times \overline{\overline{x^2 + y^2 + b^2 - 2cbx - 2sby}|^{\frac{1}{2}}}$ the equation of the curve.

Scholium. Hence it appears, that if the quantity under the radical ſign ſhould not admit of extraction, the equation of this curve will contain four dimenſions; if ſo, it cannot be that of an ellipſis.

It may be farther remarked, that the curve may cut the axis eE in as many points as the equation has dimenſions of x.

Mr. G. Cetii *likewiſe ſolved this queſtion.*

This ſolution ought to have been printed two months ago, but Mr. Waugh, *of Portſmouth, having complained that the ſhortneſs of the time allowed did not permit him to conſider it, and at the ſame time ſeeming to be very much pleaſed with it, we delayed it till now, in hopes that he would have favoured us with his ſolution of it, but he has not thought proper to ſend any.*

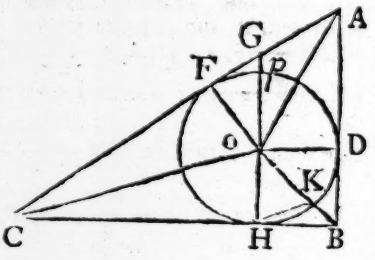
Queſt. 21, *anſwered by Mr.* T. Barker, *of Wiſſett, in Suffolk.*

IF $a =$ annuity 40l. $p =$ 200l. the ſum to prolong this annuity 20 years, $m =$ 50 years, $n =$ 30 years, and $r =$ 1l. and its intereſt for 1 year; then, per known theorem, $p = \frac{\frac{a}{n} - \frac{a}{m}}{r - 1}$; which put into numbers, &c. becomes $1 + 5r^{51} = r^{20} + 5r^{50}$; ſolved $r =$ 1.035306; hence the required rate of intereſt $=$ 3l. 10s. 7.34d. Q. E. I.

This queſtion was alſo ſolved by Meſſrs. T. Todd, I. Dalby, W. Sewell, J. Barber, *and* E. Smith.

Queſt. 22, *anſwered by Mr.* Peter Bernardin, *of Greenwich.*

SUppoſe the triangle ABC, the required triangle, in which there is given the line KB, (that is) the ſhorteſt diſtance between the right angle, and the periphery of the inſcribed circle; and the line CH paſſing through the centre and parallel to the perpendicular.

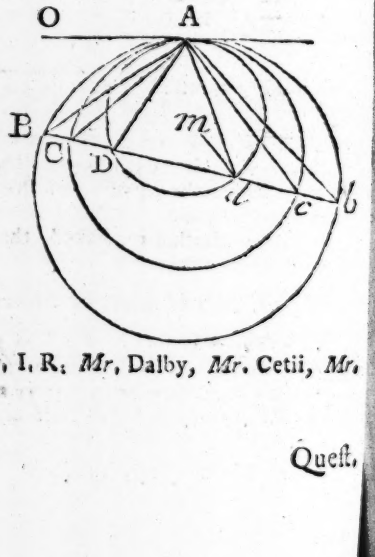


If the line KH be drawn through K and H, having the angle BOH, and KO being $=$ HO, we get HKB; therefore, in the triangle HKB having all the angles and the ſide KB, HB is found, which is equal to HO $=$ DB $=$ OD, and GH $-$ HO $=$ GO; let fall FO perpendicular to AC; then having FO and GO, we have FOG and FOD, alſo FOA; therefore in the right angled triangle FOA having FO and FOA, FA $=$ AD becomes known, and having FOH, CH $=$ CF is alſo known. —— Hence we ſhall find AC $=$ 54.47, CB $=$ 47.95, and AB $=$ 25.83.

Anſwers to this queſtion were received from Meſſrs. Barber, Walker, Waugh, Smith, Cetii, Barker, Sewell, Robinſon, Muſgrave, Dalby, Rotherham, Hague, Tytler, Huſbands *the propoſer, and* Todd.

Queſt. 23. *anſwered by Mr.* Matthew Halls, *officer of exciſe at Pinchbeck near Spalding.*

LET OA be the tangent, and from the point of interſection *d*, draw the right line *dm* parallel to *c*A. Then will $\angle mdB = \angle AcB$, and $\angle mdA = \angle dAc$. But (by 32 E. 3.) $\angle OAC = \angle AcB = \angle mdB$, and $\angle OAD = AdB$. Then $\angle DAC = \angle OAD - \angle OAC = AdB - mdB = mdA = dAc$. And, if from the point of interſection *c*, be drawn a line parallel to *b*A, by proceeding in the ſame manner, it will be proved, that $\angle BAC = \angle bAc$, &c. let the number of circles be what it will.



This queſtion was alſo anſwered by Mr. Bernardin, *Mr.* I. R. *Mr.* Dalby, *Mr.* Cetii, *Mr.* Waugh, *and Mr.* M. T.

Queſt.

Queſtion 24, *anſwered by the propoſer*, *Mr.* Edward Smith, *of Baldock*, *Hertfordſhire.*

PUT $d =$ diameter of the circle circumſcribing the greateſt com. parabola, whoſe parameter $p = \frac{d}{4}$ and $VD = \frac{3d}{4}$, per queſt. abſciſſa $VA = x$, ſemi-ordinate $AC = y$; then, per queſt. $y = \sqrt{dx - x^2} - \sqrt{px}$, the equation of the curve VCD, whoſe area is required; then will $\dot{x}\sqrt{dx - x^2} - \dot{x}\sqrt{px} =$ fluxion of the area of VAC, whoſe fluent, when $x = \frac{3d}{4}$, is $= \frac{1}{2}$ area of the ſegment of a circle (whoſe diameter is $= d$ and verſed fine $= \frac{3d}{4}$), $= \frac{d^2\sqrt{3}}{8} =$ required area of VCD. Laſtly, to find the ſolidity of the ſolid VCDN, generated by the rotation of the curve VCD round its axis VD. ——— Put $c = 3.1416$, and let x and y remain as on the other ſide; therefore, $c \times : \frac{5dx\dot{x}}{4} - x^2\dot{x} - \sqrt{d} \times x\dot{x}\sqrt{d - x} =$ fluxion of the ſolidity of the ſolid VCN, whoſe fluent, when $x = \frac{3d}{4}$, is $\frac{541cd^3}{1920} =$ required ſolidity of the ſolid VCDN. Q. E. I.

This queſtion was alſo ſolved by Meſſrs. Waugh *and* Todd.

Queſt, 25, *anſwered by Mr.* David Waugh, *of Portſmouth.*

ASSUME $\dot{x} = \frac{\dot{y}}{s}$; therefore, $\ddot{y} = \dot{s}\dot{x}$ and $\frac{\ddot{y}}{\dot{y}^2} = \frac{\dot{s}}{s^2\dot{x}}$; therefore $\frac{b\dot{s}}{s^2} = a\dot{x} + x\dot{x}$ whoſe fluent is $-\frac{b}{s} = ax + \frac{x^2}{2}$, and $\dot{y} = -\frac{2b\dot{x}}{2ax + x^2}$, whoſe fluent is $y = \frac{b}{a}$ Hy. L. $\frac{2a + x}{x}$; and therefore when $x = 1$, $y = \frac{b}{a}$ Hy. L. $1 + 2a$, the required value of y. Q. E. I.

Mr. Thomas Allen, *of Spalding*, *and Mr.* J. Barber, *alſo ſolved this queſtion in a very elegant manner.*

Queſt. 26, *anſwered by the propoſer Mr.* Tho. Allen, *of Spalding in Lincolnſhire.*

BY the equation of the curve we have $\sqrt{\dot{x}^2 + \dot{y}^2} = \frac{a^2\dot{y}}{\sqrt{a^4 - y^4}}$. Put $y = a\sqrt{x}$, then $y4 = a4x^2$, and $\dot{y} = \frac{a}{2} \times x^{-\frac{1}{2}}\dot{x}$, which values of $y4$ and $\dot{y}$ ſubſtituted in the above expreſſion, we have $\frac{a}{2} \times \frac{x^{-\frac{1}{2}}\dot{x}}{\sqrt{1 - xx}}$ for the fluxion of the curve, whoſe whole fluent, or the length of the required curve, by Theo. I. p. 146, of *Landen*'s Lucub. is $\frac{a}{2} \times e + \sqrt{ee - 2f}$, where e denotes one fourth of the periphery of an ellipſis whoſe ſemi-axes are $\sqrt{2}$ and 1 reſpectively, and f one fourth of the periphery of a circle, whoſe radius is unity.

This queſtion was alſo ſolved by Mr. J. Barber, *and Mr.* D. Waugh.

New QUESTIONS *to be anſwered.*

Queſt. 31. *By Mr.* John Clarke, *of Lincoln.*

REquired the leaſt whole number which being divided by 12 ſhall leave a remainder of 4, but being divided by 22 ſhall leave 20.

Queſtion 32. *By Mr.* Tho. Walker, *of Stantonbury, Bucks.*

GIven $x^2 - 1000z = z^2$. Query x and z in integers; together with two general theorems for finding their values, and to be ſo conditioned, that the ſaid theorems may neither have the ſquare of the quantity aſſumed, nor the ſquare of the given quantity, nor the ſquare of any of its parts contained in them, as alſo the inveſtigation, and all their values in whole numbers, deduced therefrom?

Queſt. 33. *By Mr.* John Barber, *of Saxmundham in Suffolk.*

REquired the dimenſions of a ſolid generated by the revolution of a curve about its axis, whoſe equation is $ay^4 + x^3y^4 = x^{10}$; when the ſolidity is a maximum?

Queſt. 34. *By Mechanicus.*

SUppoſe the weight of a given priſmatic beam known, one end thereof fixt in a wall, whilſt it can but juſt ſuſtain a known weight ſuſpended at the other end; 'tis propoſed to determine a beam ſimilar to this, of the ſame timber, which may ſuſtain the greateſt weight poſſible.

Erratum in the laſt Mag. in Mr. Moſs's *queſt.* p. 294. l. 1. col. 2. *read* $px \times \overline{b^2 + b^2 - b^2} \times n$.

POETRY.

The Knight *and the* Countryman. *A* Fable.

TRUE happineſs, my deareſt friend,
Does not in gaudy courts attend.
It is not in a ſplendid board,
With dear, ſuperfluous dainties ſtor'd;
But in the virtuous, rural cell,
Where peace and ſweet contentment dwell.
The wealthy lord, perplex'd with grief,
Flies to the tavern for relief.
But dull, inſipid is the mirth,
Which to a bottle owes its birth,
Time out of mind (as we are told,)
There liv'd a knight well fraught with gold:
He had beſides, from taxes clear,
More than three thouſand pounds a year.
His table dear-bought dainties grac'd,
Whilſt paraſites extoll'd his taſte.
He wanted nothing to excite
The moſt faſtidious appetite.
Yet, 'midſt this plenty, ne'er could find
The trueſt banquet — peace of mind.
Tormenting troubles gnaw'd his breaſt,
Anxiety devour'd his reſt.
Seldom was gentle ſleep his ſhare;
Haunted with fears, oppreſs'd with care.
Tenant to him, there liv'd a ſwain,
Stranger to all the arts of gain:
By proud ambition never led,
With ſweat he earn'd his daily bread.
No anxious thoughts his peace annoy'd,
Nor penſive gloom his bliſs deſtroy'd.
Ne'er did he want that bleſſing, health,
Superior to the greateſt wealth.
This ſwain, Sir Thomas once ſurvey'd,
Laborious in a neighb'ring mead.
He ſaw him toil, he ſaw what pains
He took, to fertilize the plains.
Mov'd with concern, the wealthy knight
Did thus the lab'ring hind invite.
"Ceaſe, friend, to work; from toil be free:
Be wiſe, and come, and live with me."
Colin comply'd, with joy elate;
Hoping to find a better ſtate.
The knight firſt enter'd: then the clown
On a brocaded couch ſat down;
Gazing about with wond'ring eye,
To ſee ſuch rich variety.
He ſaw the board with dainties crown'd,
And wines the ſide-board ſpread around.
But when he ſaw Sir Thomas ſit,
Scarce eating now and then a bit;
But wine oft' ord'ring to be brought,
To diſſipate an anxious thought:
Whilſt cringing flatt'rers round him bow'd,
And ſeem'd t' adore him as a god.
"Good heav'ns!" the wond'ring peaſant cries,
"What trouble under grandeur lies!
Give me my humble cot, I hate
The haughty dwellings of the great.

Give

Give me my plain but healthful fare,
Free from diſturbance, free from care.
Let others mad with Bacchus ſing ——
My drink let be the chryſtal ſpring.
Grant me a faithful friend or two;
For I deteſt the flatt'ring crew.
To theſe, kind heav'n I thee implore!
Subjoin content — I aſk no more."

To Miſs M**** F****y.

LOng Strephon, ſilent, bore the cruel pain,
Fated the wretch who loves, and loves in vain;
Pierc'd was the youth from bright Zelinda's eyes,
Nor ſwifter thro' the void the light'ning flies:
Inſtant the ſubtle ray pervades each part,
Skims thro' his eyes, and quivers in his heart.
Strephon, no more the debonair and gay,
To black deſpair and gloomy thoughts a prey;
With downcaſt eyes, which ever view the ground,
Penſive and ſad he meditates the wound.
Oh Love! he cries, eaſe! eaſe! a wretch's grief,
Inſpire the means to give my ſoul relief,
Quick, teach me ev'ry art the nymph to move,
Strephon muſt die, or fair Zelinda love.
Thus in her form is matchleſs grace expreſt,
And ſnow but imitates her whiter breaſt:
Yet void of pride, ſhe reigns a pitying queen,
As mercy mild, as innocence ſerene.
All good: ſhe wiſhes that her charms were leſs;
Or, equal to her will, her pow'r to bleſs.
Such, and ſo perfect is the lovely maid,
And ſuch the charms my liberty betray'd.
Loſt to all eaſe, tell her I joyleſs rove,
And life's a curſe without Zelinda's love,
That vain my paſſion or my fate to fly,
'Tis fixt; or ſhe muſt love, or I muſt die.
Yet ſhall my pray'rs expend my lateſt breath,
And my tongue bleſs her in the hour of death.
Such in that ſolemn hour, as all the paſt,
Preſerve Zelinda, heav'n, ſhall be my laſt.

July 6, 1764. *Thomas de Stonton.*

An Ænigma. *Addreſſed to Mr. John Clarke.*

YE riddling wits, ingenious to reveal,
What ſome from you obſcurely would conceal,
Tell me whence we proceed, or who we are?
Poor couple! but a merry fruitful pair:
We're white as chaſte Pygmalion's miſs (we think,)
And yet, our children are as black as ink.
They're forty-two in number, yet we bear
Each one and twenty, as our equal ſhare:
But ſome perhaps will ſay, they're not our own,
Becauſe we very often lie alone.
We came from India, if you fain wou'd know,
Our children ne'er will any bigger grow.
Whole troops of men they often diſcompoſe,
For which we oft receive ill-natur'd blows.
Dame Fortune makes us execute her will,
To gain th' aſcendant over human ſkill;
She ſways our lives, with us ſhe moſt prevails,
And while ſhe favours one, another rails,
Damns her, and in his paſſion bites his nails.
Ye can't tell which of us is man or wife,
Nor which child's boy or girl, not for your life;
We've each of us an odd one, that makes ſport
When e'er they pleaſe together to reſort;
In armies we delight to play our tricks,
One there, ſometimes, does as much hurt as fix.
Ha' done, — I almoſt hear each genius cry,
Don't you unriddle it, pray let me try.

Thomas de Stonton.

Anſwer to T. Adam's *Ænigma in* April *Magazine, — in a Query addreſſed to Miſs* Polly Stow.

HOW can I live a ſtranger to the place,
Where dwells in peace my Roſalinda's race!
Or, when in haſte I'm called to diſtant parts,
What can expreſs the SIGNs of bleeding hearts?
What elſe but ſighs and ſofteſt looks can prove
The happy ſymptoms of a mutual love?
What can I do? how eaſe my tortur'd mind?
Thus caught by melting charms, by love confin'd!

T. WALKER.

Anſwer to the firſt Rebus in the Magazine for June *laſt. By Mr.* John Hyde.

A Gun's often us'd in the Nation's defence,
An ant is admir'd for its care and good ſenſe;
Youth moſt people wiſh for when age does appear;
Thus GAY is the poet careſs'd by the fair.

Anſwer to the ſecond Rebus. To the Propoſer.

THAT your Rebus is PROTESTANT
can't be deny'd,
Which ſoon did appear to your ſervant John Hyde.

Kind

Kind Advice to a certain formal Batchelor.

YOUR formal queerneſs leave,
To thoſe who won't believe
Fond hearts with rapture tingle;
No longer live deſpis'd,
(Your conduct ſcrutiniz'd)
A man forlorn and ſingle.

Your comfort and your care,
With pleaſing part'ner ſhare,
Your joys and ſorrows mingle;
Attain that winning eaſe,
That certain way to pleaſe,
That none acquire while ſingle.

Enjoy your future life;
The voice of tender wife,
Like muſic ſoft will gingle;
'Twill harmonize your mind,
Inſpire a taſte refin'd,
Unknown to men that's ſingle.

BENEDICTA.

A TALE. *By Dr.* Grainger. *(Written in the* Weſt Indies.)

SOON as young reaſon dawn'd in Junio's breaſt,
His father ſent him from theſe genial iſles,
To where old Thames with conſcious pride ſurveys
Green Eton, ſoft abode of every muſe.
Each claſſic beauty ſoon he made his own;
And ſoon fam'd Iſis ſaw him woo the nine,
On her inſpiring banks: love tun'd his ſong;
For fair Theana was his only theme,
Acaſto's daughter, whom, in early youth,
He oft diſtinguiſh'd; and for whom he oft
Had clim'd the bending coco's airy height,
To rob it of its nectar; which the maid,
When he preſented, more nectarious deem'd.—
The ſweeteſt ſappadillas oft he brought,
From him more ſweet ripe ſappadillas ſeem'd.—
Nor had long abſence yet effac'd her form;
Her charms ſtill triumph'd o'er Britannia's fair.
One morn he met her in Sheen's royal walks;
Nor knew, till then, ſweet Sheen contain'd his all.
His taſte mature approv'd his infant choice.
In colour, form, expreſſion, and in grace,
She ſhone all perfect; while each pleaſing art,
And each ſoft virtue that the ſex adorns,
Adorn'd the woman. My imperfect ſtrain,
Which Percy's happier pencil would demand,
Can ill deſcribe the tranſports Junio felt
At this diſcovery: he declar'd his love;
She own'd his merit, nor refus'd his hand.
And ſhall not Hymen light his brighteſt torch,

For

The bending coco's] *The coco-nut tree is of the palm genus; there are ſeveral ſpecies of them, which grow naturally in the Torrid Zone. The coco-nut tree is, by no means, ſo uſeful as travellers have repreſented it. The wood is of little or no ſervice, being ſpungy, and the brown covering of the nuts is too rough a texture to ſerve as apparel. The ſhell of the nut receives a good poliſh; and, having a handle put to it, is commonly uſed to drink water out of. The milk, or water of the nut, is cooling and pleaſant; but, if drank too freely, will frequently occaſion a pain in the ſtomach. A ſalutary oil may be extracted from the kernel; which, if old, and eaten too plentifully, is apt to produce a ſhortneſs of breathing. A ſpecies of rack is made from this tree, in the Eaſt Indies. The largeſt coco-nut trees grow on the banks of the river Oronoko. They thrive beſt near the ſea, and look beautiful at a diſtance. They afford no great ſhade. Ripe nuts have been produced from them in three years after planting. The nuts ſhould be macerated in water, before they are put in the ground. Coco is an Indian name; the Spaniards call it alſo* palma de la Indias; *as the ſmalleſt kind, whoſe nuts are leſs than walnuts, is termed by them* Coquillo. *This grows in Chili, and the nuts are eſteemed more delicate than thoſe of a larger ſize. In the Maldivy-Iſlands, it is pretended, they not only build houſes of the coco-nut tree, but alſo veſſels, with all their rigging; nay, and load them too with wine, oil, vinegar, black ſugar, fruit, and ſtrong water, from the ſame tree. If this be true, the Maldivian coco-nut trees muſt differ widely from thoſe that grow in the Weſt-Indies. The coco muſt not be confounded with the coco-nut tree. That ſhrub grows in the hotteſt and moiſteſt vales of the Andes. Its leaf, which is gathered two or three times a year, is much coveted by the natives of South-America, who will travel great journies upon a ſingle handful of the leaves, which they do not ſwallow, but only chew. It is of an unpleaſant taſte, but, by uſe, ſoon grows agreeable. Some authors have alſo confounded the coco-nut palm, with the coco, or chocolate-tree. The French call the coco-nut tree,* Cocotier. *Its ſtem, which is very lofty, is always bent; for which reaſon it looks better in an orchard than in a regular garden. As one limb fades, another ſhoots up in the center, like a pike. The botanical name is* Palma indica, cocifera, anguloſa.

Sappadillas.] *This is a pleaſant taſted fruit, ſomewhat reſembling a bergamont-pear, in ſhape and colour. The tree which produces it, is large and ſhady. Its leaves are of a ſhining green; but the flowers, which are monopetalous, are of a paliſh white. The fruit is coronated when ripe, and contains, in its pulp, ſeveral longiſh black ſeeds. It is wholeſome. Antigua produces the beſt ſappadillas I ever taſted. The trivial name is Spaniſh. Botaniſts call it* Cainito.

For this delighted pair? Ah, Junio knew,
His ſire deteſted his Theana's Houſe!—
Thus duty, reverence, gratitude, conſpir'd
To check their happy union. He reſolv'd
(And many a ſigh that reſolution coſt)
To paſs the time, till death his ſire remov'd,
In viſiting old Europe's letter'd climes:
While ſhe (and many a tear that parting drew)
Embark'd, reluctant, for her native iſle.
Tho' learned, curious, and tho' nobly bent,
With each rare talent to adorn his mind,
His native land to ſerve; no joys he found.—
Yet ſprightly Gaul; yet Belgium, Saturn's reign;
Yet Greece, of old the ſeat of every muſe,
Of freedom, courage; yet Auſonia's clime,
His ſteps explor'd; where painting, muſic's ſtrains,
Where arts, where laws, (philoſophy's beſt child),
With rival beauties, his attention claim'd.
To his juſt-judging, his inſtructed eye,
The all-perfect Medicean Venus ſeem'd
A perfect ſemblance of his Indian fair:
But, when ſhe ſpoke of love, her voice ſurpaſs'd
The harmonious warblings of Italian ſong.
Twice one long year elaps'd, when letters came,
Which briefly told him of his father's death.
Afflicted, filial, yet to Heaven reſign'd,
Soon he reach'd Albion, and as ſoon embark'd,
Eager to claſp the object of his love.
Blow, proſperous breezes; ſwiftly ſail, thou Po:
Swift ſail'd the Po, and happy breezes blew.
In Biſcay's ſtormy ſeas an armed ſhip,
Of force ſuperiour, from loud Charente's wave
Clapt them on board. The frighted flying crew
Their colours ſtrike; when dauntleſs Junio fir'd
With noble indignation, kill'd the chief,
Who on the bloody deck dealt ſlaughter round.
The Gauls retreat; the Britons loud huzza;
And touch'd with ſhame, with emulation ſtung,
So plied their cannon, plied their miſſil fires,
That ſoon in air the hapleſs thunderer blew.
Blow proſperous breezes, ſwiftly ſail thou Po,
May no more dangerous fights retard thy way!
Soon Porto Santo's rocky heights they ſpy,
Like clouds dim riſing in the diſtant ſky.
Glad Eurus whiſtles; laugh the ſportive crew;
Each ſail is ſet to catch the favouring gale,
While on the yard-arm the harpooner ſits,
Strikes the boneta, or the ſhark inſnares.
The little nautilus with purple pride
Expands his ſails, and dances o'er the waves;
Small wing'd fiſhes on the ſhrouds alight;
And beauteous dolphins gently played around.
Tho' faſter than the Tropic-bird they flew,
Oft Junio cry'd, ah! when ſhall we ſee land?
Soon land they made: and now in thought he claſpt
His Indian bride, and deem'd his toils o'er pay'd.
She, no leſs amorous, every evening walk'd
On the cool margin of the purple main,
Intent her Junio's veſſel to deſcry.
One eve, (faint calms for many a day had rag'd,)
The winged dæmons of the tempeſt roſe;
Thunder, and rain, and lightning's awful power.
She fled: could innocence, could beauty claim
Exemption from the grave; the æthereal bolt,
That ſtretch'd her ſpeechleſs, o'er her lovely head
Had innocently roll'd.
Mean while, impatient Junio lept aſhore,
Regardleſs of the dæmons of the ſtorm.
Ah!

Porto Santo.] *This is one of the Madeira Iſlands, and of courſe ſubject to the king of Portugal. It lies in 32.33 degrees of North latitude. It is neither ſo fruitful nor ſo large as Madeira Proper, and is chiefly peopled by convicts, &c.*

The boneta.] *This fiſh, which is equal in ſize to the largeſt ſalmon, is only to be found in the warm latitudes. It is not a delicate food, but thoſe who have lived for any length of time on ſalt meats at ſea, do not diſlike it. Sir Hans Sloane, in his voyage to Jamaica, deſcribes the method of ſtriking them.*

Or the Shark.] *This voracious fiſh needs no deſcription; I have ſeen them from 15 to 20 foot long. Some naturaliſts call it* Canis Carharias. *They have been known to follow a ſlave-ſhip from Guinea to the Weſt Indies. They ſwim with incredible celerity, and are found in ſome of the warmer ſeas of Europe, as well as between the tropics.*

Nautilus.] *This fiſh the ſeamen call a Portugueſe man of war. It makes a moſt beautiful appearance on the water.*

Winged fiſhes.] *This extraordinary ſpecies of fiſh is only found in the warm latitudes. Being purſued in the water by a fiſh of prey called Albacores, they betake themſelves in ſhoals to flight, and in the air are often ſnapt up by the Garayio, a ſea fowl. They ſometimes fall on the ſhrouds or decks of ſhips. They are well taſted, and commonly ſold at Barbadoes.*

Dolphins.] *This is a moſt beautiful fiſh, when firſt taken out of the ſea; but its beauty vaniſhes almoſt as ſoon as it is dead.*

Tropic-bird.] *The French call this bird Fregate, on account of its ſwift flying. It is only to be met with in the warm latitudes.*

Ah! youth! what woes, too great for man to bear,
Are ready to burſt on thee? Urge not ſo
Thy flying courſer. Soon Theana's porch
Receiv'd him: at his ſight, the ancient ſlaves
Affrighted ſhriek, and to the chamber point:—
Confounded, yet unknowing what they meant,
He entered haſty———

Ah! what a ſight for one who lov'd ſo well!
All pale and cold, in every feature death,
Theana lay; and yet a glimpſe of joy
Play'd on her face, while with faint, faultering voice,
She thus addreſt the youth, whom yet ſhe knew.

"Welcome, my Junio, to thy native ſhore!
"Thy ſight repays this ſummons of my fate:
"Live and live happy; ſometimes think of me:
"By night, by day, you ſtill engag'd my care;
"And next to GOD, you now my thoughts employ:
"Accept of this—my little all I give:
"Would it were 'larger'—Nature could no more;

She look'd, embrac'd him, with a groan expir'd.
But ſay, what ſtrains, what language can expreſs
The thouſand pangs, which tore the lover's breaſt?
Upon her breathleſs corſe himſelf he threw,
And to her clay-cold lips, with trembling haſte,
Ten thouſand kiſſes gave. He ſtrove to ſpeak;
Nor words he found: he claſpt her in his arms;
He ſigh'd, he ſwoon'd, look'd up, and died away.

One grave contains this hapleſs, faithful pair;
And ſtill the Cane-iſles tell their matchleſs love!

AS we have given our readers a view of the monument erected at Calcutta, in Bengal, by Mr. Holwell, to the memory of the unfortunate ſufferers in the black hole priſon; it is neceſſary to ſay a few words on the occaſion, and to mention the inſcriptions.

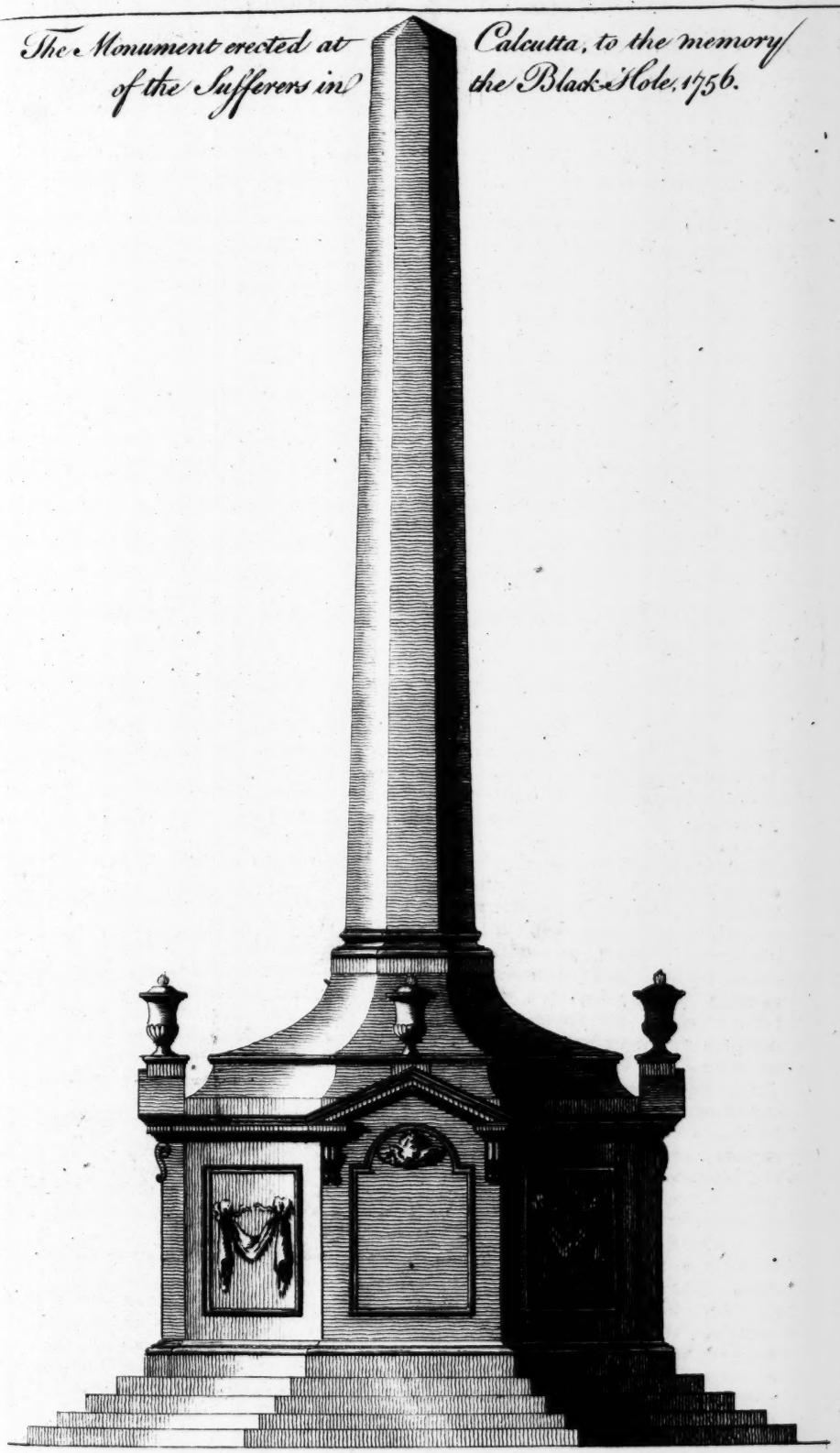
In the year 1756, Surajud Dowla, nabob of Bengal, became an enemy to the Engliſh. His hatred to them proceeded from ſome information he had received that they were rich: being exceſſively avaricious he reſolved to plunder them. He appeared before Calcutta in the month of June, with an army of near 70,000 men. The governor (Mr. Drake) either terrified by the numbers of the enemy, or elſe, as being one of the people called Quakers, could not, from motives of conſcience, reſiſt an attack, immediately abandoned the fort, with many of the principal perſons in the ſettlement. Notwithſtanding this deſertion, Mr. Holwell, the ſecond in command, aſſiſted by a few gallant friends, and the remains of a feeble garriſon, bravely held out the fort to the laſt extremity: but a noble defence could not preſerve an untenable place, or affect an ungenerous enemy. On the 20th of June, the fort was taken, and the garriſon, conſiſting of 146 perſons, being made priſoners, were, for that night, in this ſultry climate, crammed into a dungeon, called the black-hole priſon, a cube of eighteen feet, and walled to the ſouth and eaſt, the only quarters from which they could receive air. There is no occaſion to deſcribe the unfortunate reſidence of theſe unhappy victims. The humane reader may eaſily fancy it. Mr. Holwell, with only 22 others, came out alive next morning, to paint a ſcene of the moſt cruel diſtreſs which human nature ever ſuffered, the reſt were either ſuffocated or trampled to death. To the memory of theſe unfortunate perſons, Mr. Holwell has erected the monument, of which we have given a view. On the front of it is this inſcription.

To
The memory
Of
Edw. Eyre, W. Bailie, Eſqrs. The Rev. Jervas Bellamy, Meſſrs. Jenks, Reevely, Law, Coats, Halicourt, Jebb, Torriano, E. Page, S. Page, Grub, Street, Harod, P. Jolinſtone, Ballard, N. Drake, Carſe, Knapton, Goſling, Dod, Dalrymple; Captains Clayton, Buchanan, Witherington; Lieutenants Biſhop, Hays, Blagg, Simpſon, J. Bellamy; Enſigns Paccard, Scot, Haſtings, Wedderburn, Dumbleton: Sea Captains, Hunt, Oſburn, Purnel; Meſſrs. Carey, Leech, Stevenſon, Guy, Porter, Parker, Caulker, Bendol, Atkinſon, with ſundry other inhabitants, Military and Militia, to the number of 123 perſons were, by the tyrannic violence of Surajud Dowla, Suba of Bengal, ſuffocated in the Black Hole Priſon, of Fort William, in the night of the 20th day of June, 1756, and promiſcuouſly thrown the ſucceeding Morning into the Ditch of the
Ravalin of this place.
This
Monument is erected
By
Their ſurviving Fellow-ſufferer,
J. Z. HOLWELL,

On the Reverſe of the Monument is this Inſcription.

This horrid act of Violence
Was as amply
As deſervedly revenged
On Surajud Dowla
By his Majeſty's arms,
Under the conduct of
Vice Admiral Watſon and Col. Clive,
Anno 1757.

The Monument erected at Calcutta, to the memory of the Sufferers in the Black-Hole, 1756.



For the General Magazine.

A CANDID REVIEW *of* NEW BOOKS.

ART. 1. AN *account of the diſeaſes which were moſt frequent in the Britiſh military hoſpitals in Germany from Jan.* 1761, *to March* 1763. *By Donald Monro. M. D. Millar.* 5s. See page 309.

ART. 2. *The Sugar-cane: a poem. In two books. With notes. By James Granger, M. D.* 4to. *Dodſley.* See page 346.

ART. 3. *A guide to claſſical learning: or Polymetis abridged. By N. Tindal. Dodſley.* 12mo. 3s.

Some years ago Mr. Spence (poetry profeſſor of Oxford) publiſhed *An inquiry concerning the agreement between the works of the Roman poets and the remains of the ancient artiſts*, under the title of POLYMETIS: of which the work before us is an abridgment, by the tranſlator of Rapin. Mr. Spence's Polymetis is a work in very high eſteem among the antiquarians, the curious and the learned. It was the reſult of two very different ſcenes of life: he was 10 years poetry profeſſor of Oxford, and for above five years he was abroad, chiefly at Florence and Rome. By his profeſſorſhip he was obliged to deal in poetical criticiſm, and his travels naturally led him to the obſervation of antiques. As theſe ſtudies partly coincided, he reſolved on joining them together, "in which he found very little difficulty, for the connexion between antiquities and criticiſm is ſo natural, that they may ſeem rather to meet one another than to have been brought together by any contrivance."

His principal deſign was, (and in which he ſucceeded to the ſatisfaction of all who have read his work,) "to compare the deſcriptions and expreſſions in the Latin poets, relating to the Roman deities, with the allegorical repreſentations of the ſame, by the painters and ſculptors in their pictures, ſtatues, relievos, medals, and gems, in order to illuſtrate them mutually from one another." It was neceſſary to ſay thus much of Mr. Spence's work, that the reader might form a proper idea of the nature and ſubject of this. Mr. Tindal's deſign in abridging Polymetis is to put the ſubſtance of that excellent work into the hands of young perſons; and indeed the deſign is highly praiſeworthy, ſince a better book cannot be read by thoſe who are willing to attain a compleat claſſical knowledge, and wiſh to have a true taſte for the beauties of poetry, ſculpture, and painting. In order to lay before our readers a ſpecimen of this work we ſhall quote the account given of Minerva, "Minerva is repreſented as a beauty, but of the ſeverer kind, and without the graces and ſoftneſs of Venus. Dignity and a becoming air, firmneſs and compoſure, with juſt features, and a certain maſculine ſternneſs, make the diſtinguiſhing character of her face. Her dreſs and attributes are adopted to her character. She has an helmet on her head, and a plume nodding formidably in the air. In her right hand ſhe ſhakes a ſpear, and in her left graſps a ſhield, with the head of the dying Meduſa upon it. The ſame figure, with all its terrors and beauties, is alſo on her breaſt-plate, and ſometimes ſhe herſelf has ſerpents about her boſom and ſhoulders. — The poets agree with the artiſts. They ſpeak of her as very beautiful, but deſcribe her as more terrible. They call her handſome or graceful, but give her the titles of virago, the ſtern dark-coloured goddeſs; and mention not only a certain threatning turn in her eyes, but the very colour too it ſeems was adapted to the character of terror. — It was common with the Romans to tranſfer the attributes of their deities to the ſtatues of their emperors. This flattery was carried by the old artiſts in no point ſo far as in the Gorgon's head on Minerva's breaſt-plate. All the emperors were fond of this badge of wiſdom. — A breaſt-plate with the Meduſa's head, when worn by a deity was called Ægis. Minerva's ſhield had the ſame device and name, and ſeems to have been appropriated to herſelf and Jupiter, and uſed by them when they thundered. It is certain, Minerva is repreſented as dealing out the Fulmen of Jupiter, as well as Juno, which makes it probable they were conſidered by the Romans as one and the ſame deity under different names." .... "The name of Jupiter might ſignify the ſupreme goodneſs; of Minerva, the ſupreme wiſdom; and of Juno the ſupreme power."

ART. 4. *Satirical Trifles: Conſiſting of an ode written on the firſt attack of the gout: An ode to mankind: The Farewell, written at Woodcote, near Epſom; and five epigrams. By B. A. Fletcher.* 4to. 1s.

By the initials of the author's name we have ſome reaſon to believe him to be Mr. Benj. Allen, of Wadham College, Oxford. As we are not inclined to beſtow either praiſe or cenſure on theſe *trifles*, we will give our readers one of them by way of Specimen.

The Farewell: *written and left on the table at Woodcote near Epſom in Surry, the ſeat of Lord Baltimore, the morning of the author's departure.*

Farewell, Woodcote, charming ſeat,
Where friendſhip never fails to meet.
A tender welcome, ſafe retreat,

Bid with nature art combine,
Bid the loves and graces join,
To retain a Balt'more thine:

Groves project a cooler ſhade,
Freſher verdure deck the glade,
Water'd by the clear caſcade:

Let the gilded cieling ſhow,
Stars that glitter, ſuns that glow,
And the pencil life beſtow.

Baniſh'd far the vulgar throng,
Bid ſprightly muſic, jocund ſong,
Whip the lagging hours along.

Let th' ambitious toil for ſway,
Th' inſipid dream his life away,
We'll be happy while we may.

Here again conven'd, we'll chaſe
Looks demure, and formal face,
Sullen pride, and ſour grimace;

Wrinkled care, and ſad ſuſpence,
Vain conceit, and falſe pretence
To ſuperior innocence.

Strip the hypocrite's fine ſkin,
View him as he is, within
Black with guile, and foul with ſin.

Show poor virtue's form bely'd
To cover avarice, luſt and pride,
And a thouſand faults beſide.

If the world deceiv'd will be,
Let it be deceiv'd, while we
Will but ſmile at what we ſee.

Frolic, wit, and ſportive mirth,
Senſe enlarg'd, and heart-felt worth
Shall to genuine joys give birth.

ART. 5. *The Wallet, a ſupplementary expoſition of the Budget. Inſcribed to the man who knows himſelf miniſter. Williams and Vernor, 4to.* 1s. 6d.

There never was ſo much art made uſe of to impoſe ſo wretched a pamphlet on the public. Almoſt every morning and evening our papers were ſtuffed with letters *to the printer*, commending and diſcommending this production. We cannot believe ſuch tricks of *puffing* were printed without being paid for, as they reflected a kind of diſgrace on the papers which inſerted them. For to begin a controverſy about a pamphlet that is not worth notice, is certainly an inſult upon the judgment of the public. The caſe however is far otherwiſe where a piece appears that is evidently not the production of a common hand, and contains facts of the higheſt import; then indeed controverſies relative to it will naturally enſue; and it is a credit to the age in which we live, as well as a great proof of the uſefulneſs and happineſs of the liberty of the preſs, that there are ſuch open and impartial vehicles as our preſent news-papers, whereby every man may convey his ſentiments to the public. With regard to the Wallet, inſtead of being a *ſupplement* to the Budget, as the title ſeems to inſinuate, it is a pretended *anſwer*, and ſo poor a one, that not one ſingle fact ſtated in the Budget is overthrown. It is true, there are ſome attempts; but it is eaſy to perceive the impotency of theſe attacks, from the total want of facts and arguments to ſupport them. The beginning is a deal of abuſe upon the duke of Newcaſtle —— a little farther, upon Mr. Pitt —— then the German war —— next, high commendations on the late peace —— a long letter (originally printed in the news-papers) to the leading members of the minority: not a word of all this alludes to the Budget. Then ſome abuſe on the Budget in general —— a defence of general Conway's diſmiſſion —— &c. &c. &c. In order to palm this on the public, reports were induſtriouſly ſpread, that it came from *authority*; and many people fell into the ſnare, becauſe it had been previouſly ſaid that the miniſtry would publiſh an anſwer to the Budget; but it has not *yet* appeared. In a word, the true origin of the Wallet is this: The Budget having gone through ſix or ſeven editions, ſome author or bookſeller, or perhaps both, reſolved to levy a ſmall contribution on the public by the means of a title. It is by ſuch tricks as theſe that the readers of new publications after they have been *taken in* (as it is called) once or twice, are afraid to buy the next new book 'till they hear a character of it from ſome perſon they can depend upon. Thus it is that the bookſeller who is tender of his reputation and he who has none to loſe are included in the general deſcription of taking every ſcandalous method to impoſe on the public.

ART. 6. *Ode to the right honourable the earl of Northumberland, on his being appointed lord lieutenant of Ireland. Preſented on the birth-day of lord Warkworth, with ſome other pieces. By Chriſtopher Smart, A. M. ſome time Fellow of Pembroke-Hall, Cambridge, Dodſley. 4to.* 1s.

Prefixed to this piece, which is far from being the meaneſt of Mr. Smart's productions, is the following Advertiſement.

"Though

" Though the following piece was in a degree received at a certain time, and ſomething handſome done (according to cuſtom) yet ſuch was the modeſty of the excellent perſon to whom it was addreſſed, that the printing of it was ſo far from being approved of, that very poſitive injuctions were given to the contrary. The author therefore was content to have the manuſcript handed about among his friends for their private entertainment, determining at all events to abide by his obedience.—But at length having the honour to communicate it to a great and worthy friend, who has been for ſome years in the country, he perſuaded him to make it public, urging that the ſuppreſſion would in a degree be a loſs to letters; and as for any blame about the matter, he was ready to take that upon himſelf. This is a gentleman who has a moſt profound reſpect to my lord lieutenant, and whoſe commands were not likely to be reſiſted, as they were given with equal authority and benevolence, and in the true ſpirit of an Engliſhman, born to encounter oppoſition and triumph over difficulty." ——We ſhall ſelect a few ſtanzas of this ode to ſhew the ſpirit of it to our readers.

O how illuſtrious and divine
Were all the heroes of thy line
'Againſt Rome's ambitious cheat!
Born all theſe baſe inſidious arts,
Which work the moſt in weakeſt hearts,
To dare and to defeat!

Live, then, and triumph o'er deceit,
That with new honours we may greet
The houſe of arms and arts,
Till bleſt experience ſhall evince
How fairly you preſent that prince
Who's ſovereign of our hearts.

In pity to our ſiſter iſle,
With ſighs we lend thee for a while;
O be thou ſoon reſtor'd——
Though *Stanhope*, *Hallifax* were there,
We never had a man to ſpare
Our love could leſs afford.

ART. 7. *Hiſtory of the parliament of Great Britain, from the death of queen Anne to the death of king George* II. *Octavo. Kearſley.* 4*s. ſewed.*

Form which book, we inſert the following inſtructions given by the citizens of London to their repreſentatives, upon the acceſſion of the houſe of Hanover.

" We, the citizens of London, who have chearfully elected you to repreſent us in parliament, and thereby committed to your truſt the ſafety, liberty, property, and privileges, of us and our poſterity, think it our duty, as it is our undoubted right, to acquaint you, what we deſire and expect from you, in diſcharge of the great confidence we repoſe in you, and what we take to be your duty, as our repreſentatives.

We deſire, and expect, that you will enquire by whoſe councils it was, that, after God had bleſſed the arms of her late majeſty, and her allies, with a train of unparallelled ſucceſſes, ſhe was prevailed upon, contrary to the grand alliance, and her repeated promiſes from the throne to both houſes, to ſend to, or receive managers from, France, to treat ſeparately of a peace, without the knowledge or conſent of our allies.

By whoſe advice the emperor's miniſter, the count de Gallas, was diſcharged the court, for reſenting and oppoſing thoſe ſeparate negociations, contrary not only to the grand alliance, but to the queen's particular aſſurances to his maſter.

By whoſe advice the whig miniſtry and parliament, and the duke of Marlborough, were turned off, contrary to the aſſurances which her majeſty had given to her allies, as well as to ſome of the chief citizens of London, directors of the bank of England, &c. who honeſtly told her majeſty that it would ſink the publick credit, as it actually did.

By whoſe advice his majeſty's memorial, delivered by his miniſter the baron de Bothmer, againſt thoſe clandeſtine and ſeparate negociations, was diſregarded, and the ſaid miniſter affronted.

By whoſe advice and management our confederates were condemned without a hearing, and their memorials, on that account, diſregarded.

By whoſe advice and management her majeſty was prevailed upon to come to a ceſſation of arms with our common enemy, and then ſo ſurpriſingly to withdraw our troops from thoſe of the allies, which was attended with ſuch diſmal conſequences.

By whoſe advice and management all that we had gained by a profuſion of blood and treaſure, in a glorious and ſucceſsful war, was thrown up, juſt as we were ſeizing the prize of our conqueſt, and a free-born people brought within the view of ſlavery.

By whoſe advice and management our conſtitution was ſtruck at, by creating twelve new lords at once, to carry a vote in the upper houſe.

By whoſe advice it was, that the treaty with the Dutch for ſettling our common barrier in the Netherlands, and making them guarantees for the proteſtant ſucceſſion, was enervated, and a new treaty,

which weakened both ſecurities, made in its place.

By whoſe advice and management we were mocked with aſſurances of being free from danger of the neighbouring fortreſs of Dunkirk; and whether the late miniſtry, or any of them, did agree that the French king ſhould make a new harbour at Mardyke, as part of the equivalent for demoliſhing the fortifications and harbour of Dunkirk.

By whoſe advice and management the beſt branches of our trade were exchanged for chimæras, and the ruin of the whole endangered by a vile treaty of commerce with France.

How the expedition to Canada came to miſcarry; and by whoſe advice her majeſty, contrary to her proclamations publiſhed in New England, &c. for encouraging that expedition, came to allow the French to keep their intereſt in Canada, to ſell that in Newfoundland, and to ſettle on Cape Breton, to the great detriment of our fiſhing trade, and to the manifeſt danger of all our plantations in North America.

By whoſe advice it was that the confederates were refuſed to be invited to be guarantees to the Proteſtant ſucceſſion, tho' her majeſty had promiſed it, in her anſwer to the addreſs of both houſes, in 1708.

By whoſe advice it was that his now royal highneſs, George, prince of Wales, was denied the liberty to come and take his place in parliament, when the preſence of one of the illuſtrious family of Hanover was ſo abſolutely neceſſary to quiet the minds of the people, and to ſecure us from the juſt apprehenſions we had of danger from the pretender.

By whoſe advice it was, that his majeſty's miniſter, baron Schutz, was diſcharged the court, becauſe he demanded the writ.

By whoſe advice Sir Patrick Lawleſs the pretender's agent, or envoy, was entertained at court, at the ſame time, and honourably conveyed beyond ſea, ſoon after it was complained of in parliament.

By whoſe advice and management our holy church was in danger of being given up to popery, our civil rights to tyranny, and the way prepared for the pretender.

By whoſe advice the jacobite clans in Scotland were armed, and kept in pay; and that the levies of men for the pretender in Great Britain and Ireland were ſo long connived at?

By whoſe miſmanagement it was, that the publick affairs of the kingdom are brought under the greateſt difficulties, as well in reſpect to our trade, and the interruption of navigation, as of the great debts of the nation, which have been much increaſed ſince the laſt war, as his majeſty has been graciouſly pleaſed to inform us, in his proclamation for calling a new parliament.

We alſo deſire, and expect, that you concur in demanding an account how the money, raiſed by parliament, has been expended ſince the change of the miniſtry, 1710.

That you not only concur in ſuch enquiries, but alſo, in a parliamentary way, to bring ſuch to juſtice as ſhall be found guilty of theſe miſmanagements; this being a duty owing to ourſelves, as well as our confederates, and indiſpenſably neceſſary for retrieving the honour of the nation, and reſtoring a due confidence and harmony amongſt all the allies.

That you concur in making ſuch laws as ſhall be thought farther neceſſary to ſecure his majeſty's poſſeſſion, and the ſucceſſion of his royal poſterity, againſt all pretenders, and ſuch maxims and doctrines as have been advanced by any of our clergy, or others, for ſupporting the pretended claim, or indefeaſible hereditary right.

That you concur in making ſuch laws as ſhall be thought neceſſary for the further ſecurity of the churches of England and Scotland, as they are ſeverally by law eſtabliſhed; and for ſuppreſſing thoſe groundleſs and ſeditious clamours of the church of England's being in danger under his majeſty's adminiſtration.

That you concur in giving the king ſuch aids as ſhall be thought neceſſary for enabling his majeſty to defend the nation, to ſupport and retrieve our trade, and to keep the balance of Europe, which is threatened with a new war, by the intrigues of the common enemy.

And laſtly, we deſire and expect that you concur in ſuch laws as ſhall be thought neceſſary for uniting his majeſty's proteſtant ſubjects, and particularly for making the toleration allowed to proteſtant diſſenters inviolable, and to eaſe them of the hardſhips they have been brought under by men of arbitrary principles, and reſtleſs paſſions; becauſe of their firm adherence to the civil liberties of the nation, and eſpecially to the proteſtant ſucceſſion, when it was moſt in danger.

ART. 8. *The Patron. A comedy of three acts. By Samuel Foot, Eſq; Kearſley.* 1s. 6d.

Perſons of the Drama.

Bever,	Mr. Death.
His Friend,	Mr. Davis.
Ruſt,	Mr. Weſton.
Puff,	Mr. Hayes.

Dactyl,

Dactyl,	Mr. Granger.
Sir Roger Dowla,	Mr. Palmer.
Sir Thomas Lofty, and Sir Peter Pepperpot,	Mr. Foote.
Straytape,	Mr. Brown.
Servants,	Mr. Parſons, and Mr. Lewis.
Juliette,	Mrs. Granger.

THIS piece opens with a converſation between Bever, and his friend, about Sir Thomas Lofty, a pretended patron of all the polite arts, but at the bottom a man of intolerable vanity and ignorance. Bever is a young fellow lately arrived from Oxford, and recommended by his father to the acquaintance of Sir Thomas, as the propereſt means of initiating him into the republic of letters, an honour of which the young gentleman is ſuppoſed to be not a little ambitious. His viſits at Sir Thomas's are attended with the loſs of his heart, which Juliette, the knight's niece captivates in a ſhort time; but in return ſhe makes him a preſent of her own, and takes every method ſhe can to give him her hand into the bargain. To effect this, however, ſhe has one conſiderable difficulty to ſurmount; her uncle, upon whom her whole dependance is, having promiſed her to Mr. Ruſt, a celebrated Antiquarian.

The converſation between Bever and his friend is interrupted by the appearance of Sir Peter Pepperpot, a Weſt Indian of great fortune, who is going to feaſt on a delicious Barbecue, and is rating a couple of negroes by whom he is attended, for neglecting to carrying his bottle of Kian.

This gentleman is alſo a pretended patron of the arts: but nevertheleſs ſeems more ſolicitous about the preſervation of the body than the improvement of the mind, his whole diſcourſe turning upon the excellence of turtle; and the laſt fleet having brought him five, he tells us, that he diſpoſed of two at Cornhill, ſent a third to Almack's; and the remaining two being unhealthy, he packed them off to his Borough in Yorkſhire.——"The laſt indeed (ſays he) I ſmuggled, for the unconſcionable raſcal of a ſtage driver uſed to charge me five pounds for the carriage; but my coachman having occaſion to go into the country, he clapped a cappuchin upon the turtle, and carried it down for thirty ſhillings as an inſide paſſenger;—the frolic, however, was near proving fatal, for as Betty the bar-maid, at Hatfield, thruſt her head into the coach to know what the company choſe for breakfaſt, the turtle ſnapt her by the noſe, and it was with great difficulty they could diſengage her." Sir Peter further tells them, that his conſtituents are ſuch connoiſſeurs in turtle, that they can diſtinguiſh the paſh from the pee, and leaves them to judge by the conſumption how univerſally it is eſteemed:—Six pounds being, according to him the ſtint of an alderman; five the allowance of his wife; and the mayor, the parſon, and the recorder being indulged without limitation.

Sir Peter has no ſooner retired, than Bever and his friend are again interrupted by a quarrel between Dactyl a poet, and Puff a publiſher; owing to the latter having refuſed to purchaſe a copy of Dactyl's, which is all praiſe and panegyrick.—In this altercation, the poet and publiſher mutually recriminate.—The bard puts Puff in mind that till he took notice of him,—"his ſhop was nothing but a ſhed in Moorfields; his kitchin a pan of charcoal, and his bed under the counter;"—to which the other replies, by threatning to reſtrain his hand, and declaring he will give no more beef and carrots of a morning.

By Juliette's advice Mr. Bever had flattered Sir Thomas ſo ſucceſsfully, that the knight at laſt profeſſes the greateſt friendſhip imaginable for him and informs him of what he calls the greateſt ſecret of his life; begging at the ſame time Mr. Bever's aſſiſtance, as the ſtrongeſt mark of attachment and eſteem. Sir Thomas had it ſeems written a play, which was to be acted that night, under the title of Robinſon Cruſoe, but had tranſacted every thing with ſo much ſecreſy, that nobody ſuſpected him for the author. The manager, however, of Drury-lane, where he ſays it is to be performed, hearing that every anonymous production was placed to his own account, inſiſted upon, and obtained a poſitive promiſe from Sir Thomas, that he ſhould know the poet's name before the curtain drew up; Sir Thomas's very vanity making him rather apprehenſive about the ſucceſs of his piece, he determined to make Mr. Bever paſs for the author, that ſo, if it happened to fail, the whole diſgrace ſhould be laid at that gentleman's door, knowing that if it was well received, nothing would be eaſier than to whiſper the truth, and get the whole reputation transferred to his own. Urged by this motive, he entreats Mr. Bever would oblige him by an acquieſcence, with which our young lover, after a conſiderable ſtruggle within himſelf, complies. Unhappily for the poor knight, the play is damned before the end of the third act. Dactyl, Puff, and Ruſt, whom he had ſent to ſupport it, very quickly follow his ſervants with an account of its fate; nor is Bever long after

them,

them, but comes back fired with rage and indignation, to make Sir Thomas take the ſcandal of the play on himſelf.—In vain our patron begs, argues, remonſtrates, ſooths; Bever tells him he ſhould be gibbetted down to all poſterity, with the author of Love in a hollow tree, and aſks if he imagined any family would receive him after ſo public a diſgrace; the knight inſtantly anſwers he would; upon which Bever directly demands his niece, as a recompence for keeping the ſecret, and bearing the infamy of the piece. Sir Thomas conſents, and joining their hands, ſays to Juliette,

"Here take his hand—I owe him much
—I know it,
And make the man, although I damn the
poet."

Obſervations of the Barometer, Anemeſcope, and Hygrometer *at* Garthorp, *Lat.* 53° 45′ N. *Long. from* Greenwich, 41′ W. *By Mr.* W. Hardy.

D	Baro. Inch.	Anemeſcope.	Hyg.	D	Baro. Inch.	Anemeſcope.	Hyg.	D	Baro. Inch.	Anemeſcope.	Hyg.
1	29.90	N. W. b W.	7 D	11	29.70	W. b N.	9	21	30.00	S.	2
2	30.00	W. N. W.	0	12	29.85	S. W. b W.	5	22	29.95	S. E.	0 M
3	29.92	N. W.	2 M	13	29.96	W.	0 M	23	29.86	N. E.	3
4	29.91	N. N. W.	2	14	29.89	S. W.	4	24	29.94	N. E.	3
5	30.00	N. b E.	2	15	30.00	N.	1	25	29.55	E.	1
6	30.10	N.	1	16	30.07	W. b N.	2 D	26	29.60	S. S. W.	1 D
7	30.05	S. b E.	0 D	17	29.88	S. W.	0 M	27	29.60	E.	7
8	29.75	S. S. E.	4	18	30.00	N. E.	1 D	28	30.00	E. b S.	6
9	29.60	S.	7	19	30.15	E. N. E.	3	29	29.60	N. W.	2
10	29.46	W. b N.	6	20	30.09	E. S. E.	4	30	29.40	N. W.	0 M

A CHRONOLOGICAL MEMOIR *of* OCCURRENCES.

For JULY, 1764.

FOREIGN AFFAIRS.

RUSSIA. *Peterſburgh, June* 9.

YEſterday the vice-chancellor of the empire declared to the foreign miniſters, in a conference which is held weekly at his excellency's houſe, that though the empreſs is reſponſible to nobody for the part ſhe acts, ſhe is nevertheleſs deſirous to acquaint them, in order that they may inform their reſpective courts, that her imperial majeſty ſent her troops into Poland only upon the ſollicitations of the grandees of that republick; that her troops had no other orders but to maintain the liberty of the Polanders in the election of their king; and that they were not to commit any acts of hoſtility, unleſs they were attacked.

SWEDEN. *Stockholm, June* 22. The dearneſs of every thing increaſes here daily, inſomuch that many people can ſcarcely ſubſiſt. Thoſe who are in the ſervice of the court feel it the more, as they are paid on the ſame footing which was ſettled in 1696. The difference between that time and the preſent is very conſiderable. The price of proviſions is four times what it was at the end of the laſt century.

NETHERLANDS. *Douay, June* 24. Yeſterday about ten in the morning there was a terrible ſtorm in the neighbourhood of this city, attended with hail, of which ſeveral ſtones were as large as a hen's egg, and ſo hard that ſeveral were ſeen in the fields this morning as large as pigeons eggs, although the remaining part of the day, from two in the afternoon, was a clear ſunſhine. The corn, the hemp, the rye, and other productions are cut in pieces; and the windows and roofs of houſes are deſtroyed.

POLAND. By an extract of a letter from Comte de Treſan, member of the royal academy of ſciences, to M. Morand of the ſame academy, we are informed of the death of Bebe, the king of Poland's famous dwarf. Bebe was the iſſue of two healthy, well-made labouring people. His mother reared him with great difficulty, his mouth being ſo ſmall, that he could only take in part of the nipple. A wooden ſhoe ſerved him

him for a long time by way of cradle; and his growth to the age of twelve, was in proportion to his original littleneſs. At that age, nature ſeemed to make an effort; but this effort was not uniform, his growth being unequal in many parts; his noſe in particular being diſproportioned to the reſt of his features. Bebe gave very imperfect marks of underſtanding, and had no notion of the ſupreme being, or the immortality of the ſoul. He ſeemed to be fond of muſic, and beat time with tolerable exactneſs. He was ſuſceptible of all the paſſions incident to human nature, ſuch as anger, jealouſy, &c. At the age of 18, the ſigns of puberty were very viſible, and Bebe was ſo amouroufly inclined, that he is ſaid to have anticipated old age by the indulgence of this propenſity, for he actually died of old age before he was thirty, and began to decline from twenty-two. The king of Poland gave leave to have him diſſected, and the anatomiſts diſcovered many obſtructions, to which they attributed the ſtoppage of his growth.

The Dyet of Warſaw have ordered the crown and ſcepter, and all the regalia, which are kept at Cracow, to be removed to Warſaw on the firſt of Auguſt. The diet for electing a king, which was fixed for the 20th of Auguſt, is deferred for a week. The reaſon of the dyet's reſolving that the new king ſhall be crowned at Warſaw, is, that the caſtle of Cracow is in ſuch a ruinous condition, that the ſolemnity cannot be performed there with ſafety: but to make the citizens of Cracow ſome amends for what they may loſe thereby, the new king is to be prayed to convene at Cracow, the firſt dyet after his coronation.

GERMANY. A letter from Hamburgh, dated the 13th inſt. adviſes, that they had juſt received there the important news that the Count de Branicki, great-general of Poland, having retired into Hungary, the troops of the crown have joined thoſe of the dyet of convocation, and acknowledged the authority of prince Czartorinſki, the grand-regimentary; ſo that the troubles of that kingdom are looked upon as at an end, unleſs any other foreign troops ſhould enter into it, which there is no likelihood of. It is added, that as to the prince Radzivill, he has not forces ſufficient to ſtand his ground.

Part of the palace belonging to the elector palatine, at the capital of Heydelburg, was conſumed on the 24th ult. by lightning. The ſtorm began at three in the morning. At five one of the wings was in flames, which afterwards extended to the front and the other wing, and the fire continued burning till next morning. The two wings, the church, the ſaloon des chevaliers, and part of the offices were then entirely conſumed.

They write from Ratiſbon, that the price of proviſions there, as well as in ſeveral other parts of Germany, is more than double what it was before the late war.

Berlin, June 7. The duke and ducheſs of Brunſwick, the hereditary prince and princeſs, and the princeſs Elizabeth of Brunſwick, are expected at Potzdam To-morrow or next day, where preparations have been making for their reception and amuſement. *Lond. Gaz.*

When the royal Academy of ſciences of Berlin met lately to celebrate the aniverſary of the king's acceſſion to the throne, M. Formey, the perpetual ſecretary, opened the aſſembly with the following ſpeech.

"Gentlemen, we are met to celebrate a ſolemnity, the return of which is a certain proof of our felicity. Whilſt we can ſay Frederick reigns, we ſhall have a right to add, we are happy. If it pleaſes providence to preſerve this auguſt Monarch, which we ſhall ever pray for with the greateſt fervency, thoſe who ſhall be aſſembled here this day twelve-month, will ſee the firſt jubilee of the glorious reign, into the 25th year of which we are juſt now entering. In an uninterrupted proſperity may glide away the twenty-five following years, which will lead to the ſecond and grand jubile, at the end of which the Pruſſian monarchy will have no leſs foundation to extol the age of Frederick, than all the other monarchies ancient and modern, have had to glorify the ages of Cyrus, Alexander, Cæſar, Charlemagne, and Louis."

Vienna, June 23. The Dyet of Hungary was opened yeſterday at Preſbourg. Many of the nobility are ſetting out for that place, and the city will be the more brilliant, as the Hungarian Nobleſſe are likewiſe all repairing thither. Lodgings are at an exceſſive price. A building is erecting near the caſtle, on which 2000 people are employed. The bridge over the Danube in the neighbourhood of Preſbourg is finiſhed.

Vienna, July 7. On Tueſday evening their imperial majeſties made their public entry into Preſburg, preceded by the biſhop and prelates in their ſtate coaches; and by the magnates and inferior nobles of Hungary on horſeback. *Lond. Gaz.*

Xanten, in the Dutchy of Cleves, June 1. Never was ſeen a more complete collection of Roman Medals, than that lately found in our neighbourhood. 1800 of them are in gold, conſiderably larger than the ducat of Holland. There are all the emperors from Conſtantine to the laſt Valentinian; ſome of the Uſurper Eugene, and of the Tyrant

John

John de Ravenne, and the Connoiſſeurs know how ſcarce they are even in Italy. There are ſome, but very few of the Empreſſes Galla-Placidia and Elia-Eudoxia, which are likewiſe very ſcarce.

FRANCE. By letters from Paris we learn, that ſome experiments to render ſea-water freſh, made by the count d'Eſtaing in his voyage to St. Domingo, have proved ſo ſucceſsful, that the king has been induced to give orders for fixing a machine for this purpoſe an board all the men of war, and other ſhips that go long voyages; in order to provide againſt the dreadful calamities which have ſo often ariſen from the want of freſh water.

On the 22d ult. they had the moſt violent tempeſt at Paris ever remembered, which did great damage in the royal gardens of the Thuilleries and Luxembourg, in the bulwarks, and throughout the city of Paris and its neigbourhood.

Verſailles, June 20. The king's council quaſhed two arrets this morning, one of the parliament of Grenoble, and the other of that of Rouen; by virtue of which two perſons have been broke on the wheel, who ſince have been found to be innocent, by the confeſſion of the real criminals. The fate of the Eaſt India Company is likewiſe decided. It is to be kept up. The king makes them a gift of 12,000 actions which belong to him; but withdraws the iſles of France and Bourbon, which are henceforth to belong to the department of the Marine, in regard to adminiſtration and commerce, like all the other colonies. The company is to enjoy an excluſive trade to India, and is to be authoriſed to make a call of 400 livres per action; the dividend is to be raiſed to 80 livres for thoſe who furniſh 400 livres; and ſuch proprietors as do not anſwer this call, will forfeit their right.

Aix, in Provence, June 10. A mortal diſtemper reigns here, and throughout the province, amongſt the horſes, mules, &c. The body of one of thoſe animals was opened a few days ago, and in the inteſtines were found ſeveral long hairy worms, ſtrong and lively, though the animal had been dead ſeveral hours.

Lyons, June 29. We have ſuffered here for ſome time exceſſive heats, which came upon us all at once, having been immediately preceded by very cold weather. Yeſterday we had a moſt terrible hail ſtorm, which has broke more than 60,000 windows fronting the ſouth or the weſt; thoſe otherwiſe ſituated eſcaped. We know not yet what damage has been done in the country.

PORTUGAL. *Liſbon, June* 3. On Holy Thurſday the 31ſt of May, between eleven and twelve o'clock, the cuſtom-houſe was perceived to be on fire, and, in a very ſhort ſpace of time, the whole building which was of wood, together with the goods in the warehouſes, was reduced to aſhes. As it was a Holiday, it was a long time before aſſiſtance could be had; and the flames were immediately ſo intenſe, that nothing could be ſaved except the cuſtom-houſe books, and a very trifling quantity of goods, which happened to be near the door. The government has alotted warehouſes in the Marine Arſenal, for the Reception and diſpatch of goods. *Lond. Gaz.*

Liſbon, June 16. In ſearching among the rubbiſh of the cuſtom-houſe, there have been found a large parcel of Whalebone, ſeveral Hides, ſome damaged, others not, ſome few cheſts of ſugars, and a great deal of melted ſugar, and ſeveral remnants of woollens: the whole amounting in value to about 7 or 8000l. The warehouſes under the Marine Arſenal are preparing in all haſte for the reception of goods; and orders are given for building the new cuſtom-houſe forthwith. His moſt faithful majeſty has been pleaſed to remit the duties of export upon the whalebone ſaved after the fire. *Lond. Gaz.*

ITALY. Letters from Naples dated the 8th ult. bring a very melancholy account of the ſickneſs which has followed the late famine: an incredible number of people having died there, and in the neighbourhood, in the ſpace of four months.

Venice, June 15. Saturday the 9th inſtant, his royal highneſs the duke of York, was entertained at an aſſembly in the palace fitted up on purpoſe by the noble deputies. Sunday ſome of the nobles and the foreign reſidents had the honour to dine with his royal highneſs in his palace. In the evening his royal highneſs was at a concert of vocal and inſtrumental muſic, performed by the girls at the hoſpital of the Mendicanti. Monday the noble deputies gave a magnificent ball to his royal highneſs in the great opera theatre at St. John Chryſoſtom's, preceded by a cantata. The theatre was illuminated and decorated in a very ſuperb and elegant manner. The company, which was very numerous and brilliant, was ſerved with all ſorts of refreſhments in great profuſion, during the whole night; beſides which, an elegant ſupper was ſerved up to his royal highneſs, at a table of 24 covers, in a room adjoining to the theatre. The ſpectators in the boxes, and round the circle, were innumerable. His royal highneſs retired about three o'clock in the morning, and the ball continued till ſeven. To-morrow morning his royal highneſs leaves Venice, and propoſes

poſes ſtopping a few days at Padua. This morning the noble deputies waited upon his royal highneſs to take their leave. The eldeſt of them made his royal highneſs a very handſome compliment praying his royal highneſs, in the name of their ſenate, to aſſure his majeſty of their great happineſs in having an opportunity of teſtifying their inviolable attachment to the king and his royal family. His royal highneſs in return, aſſured them, how ſenſibly he was of their great attention towards him, and that he would make a report of it to the king. *Lond. Gaz.*

Padua, June 19. On Saturday the 16th inſtant his royal highneſs the duke of York left Venice, and went up the Brenta to Padua in a large Burchillo. When his royal highneſs arrived at the gates of the town, he was received by his excellency M. Vendramin, Proveditor, who preſented four nobles of Padua to attend his royal highneſs during his ſtay in the town; chevalier Papafavo, knight of Malta, M. Claudio, Moſciato, count Orſato, and count Panego. From the gate his royal highneſs was conducted by the proveditor in his coach to the houſe where he lodges. The proveditor had engaged a houſe for his royal highneſs, but he was pleaſed to take up with that which Mr. Murray, his Britannic majeſty's reſident here, uſually hires for the ſeaſon. The ſame evening his royal highneſs went to the opera, where a large box, very elegantly furniſhed, was prepared for him; the four deputies attending always, and refreſhments were ſerved every night of the opera. On Sunday the proveditor gave a moſt elegant ball. Within the circle there were a great number of nobility and foreigners, and round the hall a great number of maſks to ſee the dancers. At midnight his royal highneſs was conducted thro' a ſuit of apartments, elegantly furniſhed upon the occaſion, to a ſupper of forty covers. On Tueſday the proveditor invited his royal highneſs to a dinner of forty covers, which was very manificent; and after dinner there was a concert of muſic, and great ſervices of refreſhments. On the 21ſt his royal highneſs went to Vicenza to ſee the feaſt of the Corpus Domini; his excellency M. Parura, the Podeſta, waited upon his royal highneſs at his arrival, and preſented to him count Volpi, and three other nobles of Vicenza, to attend his royal highneſs during his ſtay there. The ſolemnity conſiſted of a church proceſſion, and a machine called Roue. carried about the town, made from a deſign of Palladio, which contains a number of people, with muſick, and children placed all around it, and upon the top of it. It is higher than the tops of the houſes, and is carried about by fourſcore men. In the afternoon there was a horſe-race; from which all the nobility went to Campo Martio, a large and pleaſant meadow, ſurrounded by beautiful hills covered with wood and houſes, in the midſt of which there is a large palace built expreſsly by count Volpi, to entertain one of his royal highneſs's illuſtrious anceſtors. There were 150 equipages extremely rich, which altogether formed one of the moſt beautiful ſcenes that can be perceived. After this the company retired to walk in a large garden, from whence his royal highneſs returned the ſame evening to the opera at Padua. His excellency the proveditor has made ſeveral propoſals to his royal highneſs of other entertainments; but as the weather is extremely hot, his royal highneſs has declined accepting them. His royal highneſs propoſes leaving Padua the latter end of the next week, and takes Milan and Turin in his way to Genoa. Mr. Murray, his Britannic majeſty's reſident, is to have the honour of attending his royal highneſs to Venice this evening, as his royal highneſs is deſirous of ſeeing the Arſenal privately to-morrow morning. *Lond. Gaz.*

Venice, July 11. On the 29th paſt his royal highneſs the duke of York came hither from Padua, and the next morning went to the Arſenal and on board the different ſhips that were upon the ſtocks, at which his royal highneſs expreſſed great ſatisfaction; and in the afternoon returned to Padua.

On the 3d inſtant his royal highneſs was pleaſed to accept of a dinner from the proveditor; and, after taking leave of his excellency, in his box at the theatre, ſet forward, at break of day, for Milan, and arrived that night early at Breſcia. *Lond. Gaz.*

IRELAND.

Dublin, July 7.

MONDAY next his excellency John Ponſonby, the right lord mayor, ſheriffs, &c. are to lay the foundation ſtone for the Queen's bridge over the Liffey, between king ſtreet, and Dirty-Lane.——About ſix o'clock on Tueſday morning a fire broke out in the Laboratory in the Lower-Caſtle-Yard, which communicating to ſome barrels of powder, the whole build-

building was blown up: the explosion was so great that most of the windows in the neighbourhood were broke, and other damage done; but happily no lives were lost.

SCOTLAND.

Edinburgh, July 11. The following is the genuine copy of a letter from Dr. Anderson (one of the unhappy gentlemen massacred by order of Cossim Cawn) to his friend Dr. Davidson, dated Patna, Oct. 6, 1763, the day on which he was cut off. There appears in it a fortitude and composure (under so dismal a prospect) that would do honour to the greatest names, antient or modern.

"*Dear Davidson*,

"Since my last, his Excellency has been compleatly defeated, and in consequence obliged to retreat to Jaffier Cawn's gardens yesterday, and purpóses coming into the city this day. Sumroo, with the seapoys, arrived here last night, and I suppose to effect his wicked designs; for last night Mr. Ellis, and forty-eight gentlemen with him, were massacred, and as about an equal number of soldiers and us yet remain, I expect my fate this night.

"Dear Davidson, this is no surprize to me, for I expected it all along; I must therefore as a dying man, request of you to collect and remit my estate home as soon as possible; and write a comforting letter to my father and mother. Let them know I die bravely, as a Christian ought, for I fear not him who can kill the body and no more; but I rejoice in the hopes of a future existence, through the merits of my Saviour. Dear Davidson, do not be too anxious about a fortune, let mediocrity satisfy you, and go home and comfort your friends and mine. Endeavour to recover Mr. Ellis's money, if possible; but I believe the 14,000 rupees in Mr. Hanwick's hands are safe, which will be a help to my poor friends. You may give Nicholas 200 rupees. If you can provide for him do it, he is a good boy. Now, dear friend, I take my leave of you, hoping that friendship will still subsist, for why may not friendship subsist in a future state? Friendship founded on virtue must subsist for ever. Fare you well, and may God give you satisfaction in life, and joy in death. Yours affectionately.

Signed, *William Anderson*."

COUNTRY.

Liverpool, July 13.

SUnday last died Mr. James Barton, an eminent beer brewer of this town, after a very short indisposition, occasioned by a blow from a small whip, with which he intended to have struck his horse; the blow was received on his watch, which broke its chrystal, but the injury done to the parts under were apparently so little as not to discolour, or scarcely to cause any swelling, though he died in 24 hours.

At Waddington, near Lincoln, on the 13th inst. a boy and a dog were struck by lightening; the boy's hair was burnt off his head, and it was some time before he recovered his senses; but the dog never stirred after.

The 15th instant at Warington, in the county of Somerset, fell such a storm of thunder and lightening, attended with such heavy rain and hail, as the oldest person there cannot remember; and at Banwell it was so violent that it shivered trees, and caused their leaves to drop off as in the fall of the year: the hail which fell, measured three inches in circumference; and some hay, we are t ld, was carried from Churchill to Langford, which is a measured mile.

Advice has been received from Southampton that the late thunder storms were attended with considerable damages in the islands of Jersey, and Guernsey.

LONDON.

July 2. LAST Monday evening the fourteen journeymen Printers, who some time since obtained a verdict against the king's messengers, for false imprisonment, received their money of Messrs. Carrington and Blackmore, two of the messengers, in manner following: thirteen of them who had 200l. costs and damages, received 120l. each, and one who had 300l. decreed him, received 170l. and to pay their attorney.

Satur-

Wednesday laſt Henry Culver and Thomas Walker, watermen, coming through London-bridge, with a woman paſſenger, were all unfortunately drowned.

Saturday, about 12 o'clock, a ſtag was incloſed by toils in his royal highneſs the duke of Cumberland's Paddock at Windſor, and one of his tigers let looſe at him; the tiger attemped to ſeize the ſtag by the haunch, but was beat off by his horns; a ſecond time he offered at his throat, and the ſtag toſſed him off again; a third time the tiger offered to ſeize him, but the ſtag threw him a conſiderable diſtance, and then followed him, on which the tiger turned tail, and ran under the toil into the Foreſt, among a herd of deer, one of which he ſeized, and killed in a moment. Two Indians purſued him, and whilſt ſucking the blood, they threw over his head a ſort of hood, which blinded him; they then put a collar round his neck, with chains, and, after feeding him with part of the deer, led him away.

On Saturday evening, about five o'clock, a fire broke out in the diſtil-houſe of Mr. Richards, facing Air-ſtreet, in Picadilly, ſuppoſed to be occaſioned by the head of a ſtill flying off; which in a ſhort time conſumed the ſame, and alſo the houſes of Mr. Barnett, a Smith, the Crown ale-houſe, Mr. Pearſon a Peruke-maker, and Mr. Duſton, a corn-chandler; a houſe inhabited by a ſtationer the corner of Derby-court, was alſo much damaged, beſides ſeveral houſes backwards. The maid-ſervant went up ſtairs to fetch ſome money out of her box, but before ſhe could get down again the houſe was all in flames, and ſhe periſhed in the midſt of them.

3. This day at a court of aldermen, Mr. Eaſtwick, who was choſen ſheriff of this city on midſummer-day, diſqualified himſelf by ſwearing off.

4. This morning early, a waggon going from Edmonton to Hertford, was ſtopped by two foot-pads near Houndsfield, Endfield, one of whom, without any ceremony fired his piſtol, and ſhot the waggoner thro' the arm, and the ball grazed the rim of his belly; the villians then took his money, and the bread and cheeſe he had in his ſack, and made off: the wounded man is under the care of Mr. Hammond, Surgeon, in Church-ſtreet, Edmonton.

6. This afternoon, by a great ſtorm, ſeveral large trees were ſhivered to pices in Takely Foreſt in Eſſex, and appeared as if burnt with fire: great damage was alſo done to the houſes on one ſide of the ſaid Foreſt, called Takely-ſtreet, and likewiſe to the corn in the adjacent fields.

7. Their royal highneſſes prince William and prince Henry went yeſterday to their apartments, called the Pavillions, in Hampton-Court, for the ſummer-ſeaſon.

9. Yeſterday the right honourable the lord Warkworth and his new married lady were introduced to their majeſties at St. James's, and were moſt graciouſly received.

10. Yeſterday at noon came on before lord Mansfield, at the king's bench-bar, Weſtminſter, the trial of M. d'Eon, for a libel on his excellency the count de Guerchy, the French ambaſſador; a ſpecial jury was impannelled on the occaſion; but no evidence appearing on Mr. d'Eon's behalf, he was found guilty.

This day at a court of aldermen, Mr. Lloyd, who was elected ſheriff of this city, diſqualified himſelf by ſwearing off; and a common hall is appointed for the election of two proper perſons to ſerve the office of ſheriff, in the room of him, and Mr. Eaſtwich, who ſwore off laſt Tueſday.

11. Yeſterday the committee agreed, that the following inſcription ſhall be put at the bottom of the frame of the picture of the right honourable lord chief juſtice PRATT, which is ſoon to be put up in Guildhall.

HANC ICONEM
CAROLI PRATT, Eq.
SUMMI JUDICIS C. B.
IN HONOREM TANTI VIRI
ANGLICÆ LIBERTATIS LEGE ASSERTORIS FIDI
S. P. Q. L.
IN CURIA MUNICIPALI
PONI JUSSERUNT
NONO KAL. MAR. A. D. MDCCLXIV.
GULIELMO BRIDGEN ARM. PRÆ. URB.

This morning about nine o'clock, John Henry Hairman, for a robbery near Lincoln's-inn-fields, and John Adams for perſonating a ſeaman in order to receive his wages, were carried in a cart from Newgate, and executed at Tyburn. They behaved ſuitable to their unhappy ſituation.

13. A few days ago a bull and cow very beautiful of their kind, and alſo a bird of extraordinary ſize, brought over in one of the laſt ſhips arrived from India, were preſented to her majeſty. They are placed among the reſt of the curious animals behind the queen's palace.

Yeſterday was held a common-hall, for the election of two fit and able perſons to be ſheriffs of this city, and the county of Middleſex for the year enſuing, in the room of John Lloyd and Charles Eaſtwick, Eſqrs. diſcharged from the ſaid office for inſufficiency of Wealth; when Tho. Harris, Eſq; citizen and apothecary, and William Lethieullier, Eſq citizen and clothworker, had

the majority of hands, and were duly elected.

Laſt week a curious picture repreſenting his majeſty with lord Ligonier by his ſide, reviewing a regiment of horſe in Hyde-Park; as alſo a picture of the reigning prince of Mecklenbourg, her majeſty's eldeſt brother, were fixed up in the queen's palace, and are each allowed to be extremely well executed.

Part of the celebrated collection of paintings from Kenſington is removed to Hampton court.

An apprentice to an eminent houſe in Cheapſide has been detected within theſe few days, in a kind of frugal knavery very uncommon among other rogues of the ſame claſs, having within the ſix years that he had ſerved of his apprenticeſhip, by making free with his maſter's Till, and other means accumulated no leſs than 100l. which he lodged ſafely in the Funds, till he was at liberty, when he thought he might turn it to ſome better account.

17. Yeſterday an over-drove bullock toſſed a woman in Cow croſs, and gored her in ſuch a manner that ſhe expired immediately.

Yeſterday afternnoon, as a ſhoemaker, in Newport-market, was going to bathe in a pond in Marybone-fields, by plunging too haſtily in, he ſtruck his head againſt a bone in the pond, which ſtunned him; and notwithſtanding there were ſeveral others in company, before they could get him out he was dead.

The drivers of a ſtring of waggons coming to town were robbed on Finchley Common this morning. Never before were robberies of all kinds ſo frequent at this ſeaſon of the year.

This day at a court of aldermen, Thomas Harris, Eſq; gave bond to ſerve the office of ſheriff.

18. Laſt night two young men, nearly related, coming from Chiſwick-fair, quarrelled about a woman whom they had picked up, when one of them, a carpenter, ſtabbed his companion ſo dangerouſly in the body with a knife, that he was brought home to his mother's in Weſtminſter, and lies without hopes of recovery.

Laſt night, between eleven and twelve, three ſtages were attacked between Turnham-green and Gunnerſbury-lane end, by two highwaymen, one of whom was mounted upon a grey horſe, and who robbed every paſſenger in all the ſtages, none of them being guarded, which is amazing, after ſo many robberies which have lately been committed.

This morning early the Hitchin carrier was robbed by two footpads on Hadley-common, near Barnet, of about twenty-five ſhillings, by two foot-pads; who ſoon after ſtopped Mr. Charten's waggon of Oundle, Northamptonſhire; but the driver's horſe not ſtanding ſtill, one of the villains ſhot the poor man through the arm, when they robbed him of his money, and made off over the common.

This day an eſtate belonging to John Wilkes, Eſq; ſituated in Buckinghamſhire, was ſold by auction at Mr. Langford's, for the ſum of 4,800l.

This day Mr. Harriſon arrived in London with his father's longitude time-keeper, from a voyage to Barbadoes. *See p.* 336.

19. Early yeſterday morning the paſſengers in ſeveral ſtage-coaches, &c. were robbed near Acton by two highwaymen, who made a large collection from the paſſengers.

About eleven o'clock laſt night a ſtage-coach going out of town, was attacked at the foot of Highgate hill by two highwaymen, one of whom was ſhot at by a perſon behind with a blunderbuſs, and was dangerouſly wounded, tho' they both rode off. The wounded man and an accomplice are both ſince taken.

21. Monday a poor woman in Newtoner's Lane, who had lain in but four days, being left alone by the nurſe, ſome cloths, which were hanging to dry, took fire, and the flames communicating to the bed, in which the mother and infant lay aſleep, the child was burnt to death, and the woman ſo much ſcorched that her life is deſpaired of.

Yeſterday a cauſe came on to be tried, by a ſpecial jury, at Weſtminſter-hall, before the right hon. lord chief juſtice Pratt, wherein the rev. Mr. Entick was plaintiff, and Mr. Carrington, and three other meſſengers were defendants, for ſeizing Mr. Entick's papers as one of the ſuppoſed authors of certain numbers of the Monitor; when, after many learned arguments by the counſel on both ſides, which laſted near four hours, a verdict was given for the plaintiff, in 300l. damages.

St. James's, July 21. In anſwer to the repreſentations made by his majeſty's ambaſſador at the court of Madrid, upon the late tranſactions of their governor of Jucatan, and his proceedings towards the Britiſh ſubjects employed in cutting Logwood in the bay of Honduras, the Spaniſh miniſtry have replied, that they have not received any advices from that governor relative to this affair, but that it is certain the catholic king has given poſitive orders to his governor of Jucatan to abide by and obſerve the XVIIth article

article of the laſt treaty of peace, and that he will not approve of the conduct of his ſubject who act in contravention to it. That it is the intention of his catholic majeſty, that no one ſhall impede the Engliſh in their cutting logwood in the ſtipulated places; and he will diſapprove of his governors and miniſters, whenever they act to the contrary, and renew the moſt ſtrict orders to that effect.

23. Saturday night Sarah Wyatt, one of the Black-boy-alley gang, was committed to New-priſon, Clerkenwell, for ſtabbing a young man in the body with a knife, of which wound he lies dangerouſly ill in the hoſpital; ſhe alſo very near cut off a man's finger who aſſiſted in apprehending her.

24. Saturday morning the count de Guerchy, the French ambaſſador embarked at Dover for Calais.

Yeſterday a cauſe came on before lord chief juſtice Pratt, at the court of Common Pleas at Guildhall, wherein the daughter of a reputable tradeſman in Chancery-lane was plaintiff, and a young man who lived in the neighbourhood, defendant. The action was brought for non performance of a marriage contract; when the jury gave a verdict for the plaintiff, with 300l. damages.

Early this morning, Morgan, who was to have been tried this week at the ſeſſions at the Old Bailey, for returning from tranſportation, &c. made his eſcape out of Newgate, by breaking a hole through the brick-wall of his apartment in the preſs-yard, and letting himſelf down upon an empty houſe in the Little Old-bailey, by the ſheets of his bed, which he tied to a poker that went croſs the hole, and thereby made a good faſtening. He made his eſcape with his fetters on.

25. Yeſterday came on before lord chief juſtice Mansfield, at Guildhall, the trial of ſome former officers of Biſhopſgate pariſh, for a miſapplication of money ſometime ago collected by a brief: about the middle of the cauſe, the defendants offered to pay 100l. and coſts, which being accepted by the plaintiffs, an end was put to this remarkable debate.

Likewiſe came on, by a ſpecial jury, a trial, wherein Meſſrs. Abraham Dubois and Nathaniel Lucas, merchants, in Scotch-yard, were plaintiffs, and the porters belonging to the goldſmith's company working on the Cuſtom-houſe key, were defendants, on a charge brought by the plaintiffs, of a rich trunk, value near 1000l. that was loſt on Chriſtmas eve laſt from the ſaid key, ſuppoſed to be ſtolen, and for which two porters were ſome time ſince tried at the Old Bailey, but acquitted; and after a hearing of upwards of two hours, a verdict was given for the plaintiffs, of full coſts, it being plainly demonſtrated that the defendants were anſwerable for the ſame; and this very intereſting cauſe will be a clear precedent for the future, to the no ſmall eaſe and ſafety of the commerce of this city, as to the buſineſs of ſhipping goods from the keys.

26. This morning came on at Guildhall, before lord Mansfield, and a ſpecial jury, the trial of Mr. John Williams, for republiſhing N°. 45 of the North Briton, in volumes; and after a hearing of three hours, the jury (being out about an hour and an half) found him guilty.

Immediately after this trial, came on that of Mr. George Kearſly, for publiſhing the ſame number of the North Briton; and was likewiſe found guilty.

This day at a common-hall, Braſs Croſſby, Eſq; one of the common council of Tower Ward, was elected ſheriff of this city, in the room of John Adams, Eſq; who has ſince diſqualified himſelf, before the court of aldermen, from the ſaid office.

Days appointed for holding the ſummer Aſſizes.

HOME CIRCUIT.

Lord Mansfield, and Mr. Baron Smythe.

Hertford, Monday Auguſt 6, at Hertford.
Eſſex, Wedneſday the 8th, at Chelmsford.
Kent, Monday the 13th, at Maidſtone.
Suſſex, Monday the 20th, at Horſham.
Surry, Thurſday the 23d, at Guildford.

NORFOLK CIRCUIT.

Lord Chief Juſtice Pratt, and Mr. Serjeant Sayer.

Bucks, Monday July 30, at Buckingham.
Bedfordſhire, Thurſday Auguſt 2, at Bedford.
Huntingdonſhire, Saturday the 4th, at Huntingdon.
Cambridgeſhire, Monday the 6th, at Cambridge.
Suffolk, Thurſday the 9th, at Bury St. Edmunds.
Norfolk, Monday the 13th, at the Caſtle of Norwich.
City of Norwich, the ſame day at the Guildhall.

On the Northern Circuit, the Aſſizes begin on Monday the 1ſt of Auguſt, at Kingſton upon Hull.

MIDLAND CIRCUIT.

Lord Chief Baron Parker, and Mr. Juſtice Clive.

Northampton, Tueſday July 31, at Northampton.
Rutlandſhire, Friday Auguſt 3, at Oakingham.

Lin-

Lincolnſhire, Monday 6, at the Caſtle of Lincoln.
City of Lincoln, the ſame day at the ſaid city.
Nottinghamſhire, Thurſday Auguſt 9, at Nottingham.
Town of Nottingham, Friday 10, at the ſaid town.
Derbyſhire, Saturday 11, at Derby.
Leiceſterſhire, Wedneſday 15, at Leiceſter Caſtle.
Borough of Leiceſter, Thurſday 17, at the Borough.
City of Coventry, Saturday 18, at the ſaid city.
Warwickſhire, the ſame day at Warwick.

NORTHERN CIRCUIT.

Mr. Juſtice Bathurſt, Mr. Juſtice Yates.
City of York, Saturday Aug. 4, at the Guildhall.
Yorkſhire, the ſame day, at the Caſtle of York.
Durham, Tueſday Aug. 14, at the Caſtle of Durham.
Newcaſtle upon Tyne, Saturday 18, at the Guildhall.
Northumberland, ſame day, at the Caſtle of Newcaſtle.
Cumberland, Friday Aug. 24, at Carliſle.
Weſtmoreland, Wedneſday Aug. 29, at Appleby.
Lancaſhire, Saturday Sept. 1, at the Caſtle of Lancaſter.

WESTERN CIRCUIT.

Mr. Juſtice Gould, and Mr. Baron Perrott.
Southampton, Tueſday July 31, at Winchester Caſtle.
Southampton Town, Saturday Aug. 4, at Southampton.
Wilts, the ſame day at New Sarum.
Dorſet, Thurſday the 9th, at Dorcheſter.
Pool, the ſame day at the Guildhall.
Devon, Monday July 13, at the Caſtle of Exeter.
Exeter, the ſame day at the Guildhall.
Cornwall, Monday July 20, at Bodmin.
Somerſet, Saturday July 25, at Bridgewater.
Briſtol, Thurſday July 30, at the Guildhall.

OXFORD CIRCUIT.

Mr. Baron Adams, and Mr. Juſtice Wilmot.
Berkſhire, Monday July 30, at Abingdon.
Oxfordſhire, Wedneſday Aug. 1, at Oxford.
Worceſterſhire, Saturday the 4th, at Worceſter.
City of Worceſter, the ſame day and place.
Glouceſterſhire, Wedneſday Auguſt 8, at Glouceſter.
City of Glouceſter, the ſame day and place.
Monmouthſhire, Saturday Auguſt 11, at Monmouth.
Herefordſhire, Tueſday the 14th, at Hereford.
Shropſhire, Saturday the 18th, at Shrewſbury.
Staffordſhire, Thurſday the 23d, at Stafford.

CHESTER CIRCUIT.

The Hon. John Morton, and Taylor White, Eſq;
Montgomeryſhire. Saturday Aug. 25, at Pool.
Denbighſhire, Friday the 31ſt, at Wrexham.
Flintſhire, Thurſday Sept. 6, at Flint.
Cheſter, Wedneſday the 12th, at Cheſter Caſtle.

SOUTH-WALES CIRCUIT.

John Williams, and John Hervey, Eſqrs.
Glamorganſhire, Tueſday, Aug. 21, at Cardiffe,
Breconſhire, Monday the 27th, at Brecon.
Radnorſhire, Saturday, Sept. 1, at Preſteign.

CARMARTHEN CIRCUIT.

J. Pollen, and Edward Poore, Eſqrs.
Cardigan, Wedneſday the 15th of Auguſt.
Haverfordweſt, Tueſday the 21ſt of Auguſt.
Carmarthen, Monday the 27th of Auguſt.

BIRTHS.

The lady of the hon. capt. John Bentinck, member for Rye in Suſſex, of a ſon. — The lady of lord George Sackville, of a daughter. —— The wife of Mr. King, of Chertſey in Surry, of a fine boy; it is remarkable the mother of this child is upwards of 60 years old, and the father near 72, and ſhe has had a child every year for theſe three years laſt paſt. — The lady of Sir John Hynde Cotton, bart. member for Cambridge of two ſons. — Her grace the ducheſs of Grafton of a ſon. —— The lady of the hon. Tho. Pelham, of a daughter.

MARRIAGES.

Sir James Lake, of Edmonton, to Miſs Crowther of Bow. — The hon. Miſs Mary Walpole, daughter of the right hon. Horatio, late lord Walpole, to Maurice Suckling, Eſq; of Hanover-ſquare. — Chriſtopher Hudſon, Eſq; of the Middle Temple, to Miſs Sally Davenport of Red-Lion-ſquare. —— The right hon. lord Warkworth, eldeſt ſon of the earl of Northumberland, to lady Anne Stuart, third daughter to the earl of Bute. — Mr. Abraham Haigh of Wincheſter-ſtreet, to Miſs Ennis, daughter of Mr. Deputy Ennis, in Walbrook. — Paul Orchard of Stoke Abbey in Devonſhire, Eſq; to Miſs Lawley, only

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ly daughter of Sir Robert Lawley, of Cavendiſh-ſquare, bart.—The right hon. lord Groſvenor, to Miſs Vernon, daughter of Henry Vernon, Eſq; and niece to the earl of Strafford. — Sir Charles William Blunt, bart. to Miſs Peers, daughter of Richard Peers, Eſq; of Croydon in Surry.

DEATHS.

Harry Norris, Eſq; vice admiral of his majeſty's fleet. — Felix Feaſt, Eſq; brewer, in the City Road. — Mr. Richard Littleboy, ſecond clerk of the ſecretary's office belonging to the exciſe. — Peter Redman, Eſq; a Weſt-India merchant. — The right hon. Sir John Philips, bart. knight of the ſhire for the county of Pembroke. —— Lady Anne Fane, eldeſt daughter of the earl of Weſtmorland. — At Hampſtead, Mr. Combrune, brother to Mr. Matth. Combrune, brewer, of the ſame place. — Mr. Barker, bookſeller to Weſtminſter-ſchool. —— At Yarmouth, Mr. La Grys, one of the moſt conſiderable maltſters in England. — At his ſeat at Prior Park, near Bath, Ralph Allen, Eſq; — The right Hon. William Pulteney, earl of Bath, viſcount Pulteney, lord lieutenant and cuſtos rotulorum of the county of Salop, F. R. S. and one of his majeſty's moſt hon. privy council. —— Philip Hubert, Eſq; of Pall Mall, and one of the gentlemen uſhers to the queen. — Mr. Henry Harrington, the oldeſt, and one of the moſt experienced pilots in England. — Mr. William Skelton, an eminent proctor in Doctor's Commons, and regiſter of the dioceſe of London. — The rev. Dr. Simpſon, Rector of St. George's in the Eaſt. — At Eſſex, John Jackſon, a gardiner, in the 113th year of his age. — The right hon. lady Irwin. — Dr. Benjamin Avery, treaſurer of Guy's hoſpital. — Sir Orlando Bridgman, bart.

ECCLESIASTICAL PREFERMENTS.

The rev. Mr. Croucher, to the livings of Quendon and Quickney, both in Eſſex. —— The rev. Mr. William Harriſon, to the living of St. John's in the iſle of Thanet. —— The rev. John Wright, M. A. to the living of Colſton Baſſet, in Nottinghamſhire. — The rev. Robert Sneiling, B. A. to the vicarage of Hameſworth, in the county of Devon and Dioceſe of Exeter.

PROMOTIONS.

John Eames, Eſq; to be a maſter in chancery. — ——— Newton, Eſq; to be one of the band of gentlemen penſioners, in the room of Mr. Deacle, deceaſed. — Frederick Smith, Eſq; to be chief juſtice of the province of New Jerſey in America. —— William Popplewell, Eſq; late an officer on board the Rippon man of war, to be comptroller of his majeſty's cuſtoms in Weſt Florida. — Charles Fearne, Eſq; to be deputy ſecretary to the lords of the admiralty. — Humphry Senhouſe, Eſq; to be deputy lieutenant of the county of Weſtmoreland. —— The hon. Hans Stanley, Eſq; to be governor of the iſle of Wight, in the room of lord Holmes, deceaſed. — Robert Cheſter, Eſq; to be regiſter to the biſhop of London. — Dr. Marriot, one of the advocates of Doctor's Commons, and maſter of Trinity-hall, Cambridge, to be his majeſty's advocate general. — The earl of Powis, to be lord lieutenant and cuſtos rotulorum for the county of Salop.

B——————KR——————S.

June 30. James Leyburn, of Lothbury, merchant.

July 3. Thomas Cheſlyn, of Coventry, mercer. — John Fleming, of Liverpoole, merchant. — Edward White, of Liverpoole, merchant.

7. Joſiah Muſpratt, of Winchester, grocer. — Oliver Dixon, of Dudley, Worceſterſhire, dealer. — William Howells, of Briſtol, watchmaker.

10. James Sims, the younger, late of Whitechapel Road, Middleſex, merchant.

17. Anthony Ten Brocke, of Duke's-court, St. Martin's-lane, confectioner.

21. John Gough the younger, of Leiceſter, Wool-comber. — William Milnes, of Lothbury, packer. — John Baſs of Hinckley, Leiceſterſhire, Inn-keeper. — Robert Holloway, of St. Andrew, Holborn, Wine-merchant.

24. Thomas Morrow, of Briſtol, linen-draper. — John Whitworth, of St. Leonard, Shoreditch, Middleſex, brewer and victualler. — Abraham Abrahams, the younger, of Heydon-ſquare in the Minories, London, jeweller.

BILL *of Mortality from* July 3. *to* July 24.

Buried,			Chriſtened,		
Males — 769	1582		Males — 642	1244	
Females 813			Females 602		
Under 2 years old	550				
Between 2 and 5	146		Buried,		
5 and 10 ——	69		Within the Walls	81	
10 and 20 ——	65		Without ——	360	
20 and 30 ——	143		*Midd.* and *Surry*	816	
30 and 40 ——	149		City & Sub. *Weſt.*	325	
40 and 50 ——	159				1582
50 and 60 ——	115				
60 and 70 ——	98		Weekly, *July* 3.	402	
70 and 80 ——	65		10.	409	
80 and 90 ——	21		17.	367	
90 and 100 ——	2		24.	404	
100 and 109 ——	0				1582
	1582				

Each Day's Price of STOCKS, in July 1764. ☞ Books shut, is signified thus, ———

July	Bank Stock.	In. Stock.	South Sea	3½ per Cen Old Ann.	Dit. New Ann.	3 per C.B. A. redu'd	Ditto consol.	Ditto 1726.	Ditto 1751.	3 per C. India An.	3½ B. An. 1756.	Ditto 1758.	India Bon l. s. d.	Wind at Deal.	Weather at Lond.
1	Sunday.													S by E	
2					83 7/8	84 1/4							0 18 0	E	
3	113 1/2			83 3/4		Do	86 1/4			81 1/2			Do	N	
4	Do				84 1/8	Do							Do	N E	
5	Do			83 3/8		Do				81 3/8			1 0 0	Do	
6	113					84							Do	Do	rain
7	Do			83 1/8		Do				84 3/8			1 1 0	Do	fine
8	Sunday.													Do	Do
9						Do							Do	Do	Do
10	113			82 7/8		83 3/4				81 1/8			0 18 0	S	Do
11	112 1/2			82 1/2		83 1/4				80 5/8			0 14 0	Do	Do
12	112 3/4			82		83				80		87 1/4	0 13 0	S S W	rain
13	Do	144		Do		Do							0 14 0	S	Do
14	112 1/2	145		82 1/8		83				80 1/2		87	0 15 0	E	Do
15	Sunday.													S S W	Do
16						83 3/8							0 18 0	S W	Do
17				83 3/8		Do				80 3/4			Do	S S W	fine
18		144		82 3/4		83 3/4			81			89	0 19 0	S E	Do
19				82 7/8		Do				81			1 0 0	W	Do
20	113					Do			81				Do	S W	rain
21	Do	144 1/2		83 1/4		84 1/8	84			81 1/2		89	1 1 0	N N W	fine
22	Sunday.													S W	rain
23						84 3/8							Do	N W	fine
24				83 5/8		84 1/2	84 5/8			81 5/8			1 2 0	S W	Do
25	113	145 5/8		Do		84 1/4				81 3/4			1 3 0	S	Do
26	113 1/8	145 1/2		83 1/8		Do	84 1/4			81 7/8			1 6 0	S W	rain
27	113 1/4	145		83 1/4		84 3/8	84 3/8		82 3/8	82		89	1 10 0	Do	Do
28	Do	Do		83 1/2		84 3/8	84 3/8			Do			1 9 0	Do	fine
29	Sunday.													Do	Do
30		145 1/4				Do	84 3/4						1 7 0		Do

London: The Peck Loaf to weigh 17 lb. 6 Oz. 0 Dr. Wheaten, to be sold for 2s. 2d. ½

Each Day's Price of STOCKS, in July 1764.

☞ Books ſhut, is ſignified thus, ———

ROBERT, Earl of NORTHINGTON,
Lord High Chancellor of
Great Britain &c&c&c.

The GENERAL MAGAZINE,

For AUGUST, 1764.

A ſhort Account of the Family of the Right Honourable Robert *Earl of* Northington, *Lord High Chancellor of* Great Britain: *(with his Portrait elegantly engraved.)*

THIS noble lord's family has been long ſeated at the *Grange in Hampſhire, and are of great antiquity, in that county, as appears by their intermarriages with the Berties, Paulets, and other noble families. His lordſhip was educated in the ſtudy of the law at the Temple, and early acquired great reputation in the knowledge and practice thereof. He repreſented the city of Bath in the tenth and eleventh parliaments of Great Britain, and was alſo choſen recorder of that city. In 1751 his lordſhip was appointed ſolicitor general to his preſent majeſty, then prince of Wales, and ſoon after attorney general to his royal highneſs. His lordſhip in 1752 was appointed one of his majeſty's council learned in the law, and November 6, 1756, received the honour of knighthood, and was conſtituted attorney general on the reſignation of the honourable William Murray, advanced to the office of lord chief juſtice of the court of King's Bench. On June 30, 1757, his majeſty in council was pleaſed to deliver his lordſhip the cuſtody of the great ſeal, and he was thereupon ſworn of his majeſty's moſt honourable privy council, and lord keeper of the great ſeal of Great Britain. His majeſty, on March 29, 1760, was pleaſed to create his lordſhip a peer by the titles of lord Henley and baron of Grange in the county of Southampton; and in April following he was appointed lord high ſteward for the trial of Lawrence, earl Ferrers. On the acceſſion of his preſent majeſty, his lordſhip, January 16, 1761, was ſworn lord high chancellor of Great Britain, and on May 19, 1764, the king was pleaſed to advance him to the degree of a viſcount and earl, by the ſtile and titles of earl of Northington and viſcount Henley.

His lordſhip married, December, 1743, Miſs Huband, daughter to Sir John Huband of Iſley in Warwickſhire, by whom he hath iſſue, 1. Robert lord viſcount Henley, one of the tellers of the Exchequer. 2. The Right honourable lady Biddy Lane, married to the honourable Robert Lane, (ſon and heir to the right honourable lord Bingley, and member of parliament for the city of York. 3. A ſon, born May 29, 1759.

Titles. Robert Henley, earl of Northington, viſcount Henley, lord Henley, baron of Grange, lord high chancellor of Great Britain, and one of his majeſty's moſt honourable privy council.

* Lord chancellor Northington's ſeat at the Grange was built under the direction of Inigo Jones, and in the opinion of Mr. Horace Walpole, is by far one of the beſt proofs of that celebrated architect's taſte. The hall which opens to a ſmall veſtibule with a cupola, and the ſtair-caſe adjoining, are beautiful models of the pureſt and moſt claſſic antiquity.

Arms.] Quarterly, firſt and fourth azure, a lion rampant argent, charged with eight torteauxes; ſecond and third, three battering rams.

Creſt.] A demi lion ducally crowned.

Supporters.] On the dexter ſide, a lion rampant, ducally crowned and ſemeed with torteauxes; on the ſiniſter, a ſtag ſemeed with torteauxes.

Motto.] Sola et unica virtus.

This noble lord, after having eminently diſtinguiſhed himſelf by his integrity and abilities at the bar and in the ſenate, was, without his ſolicitation or deſire, called to the high office which he now fills with ſo great applauſe. In the diſcharge of which great truſt his lordſhip has gained the approbation of his ſovereign, and the univerſal eſteem of his fellow ſubjects.

An Engliſh *ſtory, told by an* Iriſh *lord; of a* Scotch *peer, in the* Common Pleas.

THE lord Mordington, who was a Scotch Peer, but not one of thoſe who ſat in parliament, being arreſted, moved the court of Common Pleas to be diſcharged as being intitled by the act of *Union to all the privileges of a peer of Great Britain, except a ſeat in parliament; and praved an attachment againſt the bailiff; upon which a rule was made to ſhew cauſe.

And thereupon the bailiff made an affidavit, that when he arreſted the ſaid lord, he was ſo mean in his apparel, as having a worn-out ſuit of cloaths, and a dirty ſhirt on, and but ſix-pence in his pocket, he could not ſuppoſe him to be a peer of Great Britain; and therefore, through inadvertency arreſted him.

The court diſcharged the peer, and made the bailiff aſk pardon.

Forteſc. Rep. p. 165.

Pro Rege ſæpe, pro Grege ſemper.

THE author of that extraordinary performance called "*Droit le Roy*" having preſumed to advance tenets totally inconſiſtent with the ſpirit of our happy conſtitution, an Engliſhman thinks it his duty to confute them the firſt opportunity, which he purpoſes doing by way of dialogue between the *majority* and *minority*, the ſentiments of the former are extracted from "*Droit le Roy*" thoſe of the latter from the writings of the late Mr. juſtice Foſter.

Majority. By deſcent, the next heir in blood is immediately, compleatly, and abſolutely king, without any eſſential ceremony, or act to be done *ex poſt facto*, and the coronation is but a royal ornament, and outward ſolemnization of the deſcent; a ceremony to ſhew the king unto the people, that is to ſay, coronation is only a ceremony, and ſuch a ceremony as *doth* not any thing, but only declareth what is *done*: the king was king before it, as much as he is after it; only by it he is declared to be what he was before, and what he ſhould have been ſtill, though he had not been ſo declared. *Droit le Roy.* P. 17, 18.

Minority. I am very far from thinking that the ſolemnity of a coronation is to be conſidered *among us* meerly as a royal ceremony, or as a bare notification of the deſcent of the crown: I admit that it is, on the part of the nation a public ſolemn recog-

* By 23 Article of the Union, viz. 5 An. chap 8.

recognition that the regal authority, and all the prerogatives of the crown are veſted in the perſon of the king, antecedent to that ſolemnity. But the ſolemnity of a coronation *with us* goeth a great deal farther. The coronation oath importeth on the part of the king, a public ſolemn recognition of the *fundamental rights of the people*; and concludeth with an engagement under the higheſt of all ſanctions, that he will *maintain* and *defend thoſe rights*; *and to the utmoſt of his power make the laws of the realm the rule and meaſure of his* conduct. *Sir Mich. Foſt. Diſc. of high treaſon.* P. 189. *See Sidney, on government.* P. 91, 92. Sect. 7.

Majority. But, whether an act of parliament may exclude the ſucceſſion in blood, is the greateſt queſtion? And we for our parts have ſtatutes that make it treaſon to deny it, but never otherwiſe made than only for fear or flattery of the preſent prince, and never obſerved; in the civil wars between the two houſes of York and Lancaſter, how many ſtatutes have been made to the diſinkeritance of the title of York, and all vaniſhed in ſmoak!

Minority. The diſtinction between *de Jure* and *de facto* kings was taken up by the houſe of York to ſerve the purpoſes of ambition and revenge. By the former, they meant thoſe who are preſumed to have ſucceeded to the crown in a regular courſe of deſcent. By the latter, thoſe who have not had that claim to it. The former were in their eſtimation the only rightful kings. The latter, not excepting ſuch as have claimed under a parliamentary ſettlement, no better than fortunate uſurpers.

This doctrine perfectly united the views of that faction; for the crown having been entailed by act of parliament [ſtat. 7 Hen 4. chap. 2.] on Henry the *fourth* and his iſſue, the houſe of York ſaw itſelf totally excluded, unleſs its pretenſions could be ſupported by a title PARAMOUNT *to the power of the parliament.* Proximity in blood was its only refuge, and to that the partizans of that houſe reſorted, and in ſo doing, they brought upon themſelves, in my opinion, the whole guilt of that deluge of blood, which was afterwards ſpilt in the unnatural war between the two houſes.

It is not to be wondered at that men whoſe ambition ſuggeſted to them the hope of over-turning an eſtabliſhment, to which themſelves, their anceſtors, and the whole nation had ſubmitted for more than half a century, ſhould endeavour to convince mankind of the rectitude of their intentions and the juſtice of their claim. Nor is it at all ſurprizing, that their followers, in the *heat of the times*, ſhould ſuffer themſelves to be eaſily convinced; for in the ferment of parties, *leaders never bluſh, and the herd of the party ſeldom think.* But, that perſons who are placed at an happy diſtance from thoſe diſaſterous times, ſhould in cool blood revive and adopt a doctrine, which hath now laid their country waſte, is not ſo eaſily accounted for.

But ſince this hath been done by learned men, among whom lord chief juſtice * Hales's name muſt be mentioned with all great regard, I will endeavour to point out what I take to have been the radical miſtake which lead them into a train of

* The political miſtakes of a writer of lord chief juſtice Hale's diſtinguiſhed merit deſerve great attention; eſpecially when the profeſſed enemies of the preſent government affect to ſhelter themſelves under his name, as we know they have done with ſome degree of triumph. Foſt. Obſerv. &c. P. 385.

ſpecious, but falſe reaſoning upon this ſubject.

They ſeem not to have ſufficiently attended to the nature and ends of civil power, whereof the regal dignity is a principal branch. They ſeem to have conſidered the crown and royal dignity meerly as a deſcendible property: as an eſtate or intereſt veſted in the poſſeſſor for the emolument and grandeur of himſelf and heirs, in a regular invariable courſe of deſcent. And therefore in queſtions touching the ſucceſſion, they conſtantly reſort to the ſame narrow rules and maxims of law and juſtice, by which queſtions of meer property, the title to a pigſtye or a layſtall are governed, and thence conclude, that the legiſlature itſelf cannot, without manifeſt injuſtice, interupt the ancient legal eſtabliſhed order of ſucceſſion. It cannot, ſay they, without injuſtice, give to one branch of the royal family, what by right of blood belongeth to another.

Thus they argue; and if I could conceive of the crown, as of an inheritance of *meer property*, I ſhould be tempted to argue in the ſame manner; but had they conſidered the crown and royal dignity, as a deſcendible OFFICE, as a TRUST for millions, and extending its influence to generations yet unborn; had they conſidered it in that light, they would ſoon have diſcovered the principle upon which the right of the legiſlature to interpoſe in caſes of neceſſity is manifeſtly founded, and that hence reſulteth the well known maxim *ſalus populi ſuprema lex*.

There is, and for many ages paſt hath been, a certain order of hereditary ſucceſſion eſtabliſhed among us, but it was for the ſake of the whole, and to avoid the many inconveniencies to which an uncertain ſucceſſion is ſubject, that this order of hereditary ſucceſſion ever took place. For nobody can ſay, that this or any other particular mode of government is founded in natural right. Nature diſcovered the neceſſity of civil government, but the ſeveral modes of it are either matters of choice or reſulting from meer neceſſity or accident.

Hereditary ſucceſſion in monarchical ſtates is nothing more than an expedient in government founded in wiſdom and tending to public utility. And conſequently whenever the ſafety of the whole requireth it, this expedient, like all rules of meer poſitive inſtitution, muſt be ſubject to the controul of the ſupreme power in every ſtate. Otherwiſe a nation will, in numberleſs caſes that might be mentioned, find itſelf under a fatal neceſſity of ſinking into ruin, inevitable and irretrievable. But certainly no nation was ever doomed to ſubmit to the greateſt of all evils, out of pure deference to a prudential expedient. This is too abſurd to be conceived.

Let me add, that in the parliamentary ſettlement already mentioned, the legiſlature hath proceeded upon a full conviction of the utility of this expedient. For when it hath upon emergent occaſions excluded one branch of the royal family claiming by deſcent, it hath conſtantly eſtabliſhed another in a courſe of hereditary deſcent. Title by deſcent was always eſteemed by the legiſlature a wiſe expedient in government. But in caſes of neceſſity, it was never thought to confer an indefeazable right, becauſe that would have been, *to defeat the end for the ſake of the means*. *Sir Mich. Foſt*. Obſervations on ſome paſſages in the writings of lord chief juſtice Hale, relative to the principles on which the revolution and preſent happy eſtabliſhment are founded. P. 403, &c. *See* Sidney on govern. chap. 3. p. 398.

CASE

CASE *concerning bankruptcy and execution.*

IN June laſt, A. B. a Nottingham hoſier, applied to C. D. a hoſier in London, and one of his cuſtomers, upon information from C. D himſelf of his being likely to become inſolvent, to ſettle accounts: and there being at that time upwards of 300l. due to A. B. he went ſeveral times to C. D's houſe in expectation of payment but to no purpoſe, by reaſon that C. D, refuſed to be ſeen by him.

On the twenty-ſecond of June laſt, C. D wrote A. B. a letter in the following words.

Sir,

" I have here incloſed the whole " (except Evans and Crawley) and " am ſurprized at the account, for " I did not imagine by the ruff draft " I made before, they would have " amounted to near ſo much; how- " ever, this is the true and exact " liſt, and I humbly beg you will " endeavour to get them all to come " in. If the creditors think pro- " per, I am willing to do all I can " towards ſelling off the ſtock, " in order to make the moſt of " them, though there is ſo much " deficient. If it is required, I " will give in an account of my " loſſes, and I dare ſay then, they " will not think I have ſpent the " money. I have never had ſcarce " enough to ſupport the family; " and, when a loſs happened, was " ſinking the capital; but I have " ſhuffled on in hopes of amend- " ment, and endeavouring to get " the better on it, but to no pur- " poſe.—I do not mean to keep any " thing from you, therefore, I hope " they will agree to take what " there is: the longer it is in hand, " the leſs there will be, for we muſt " have bread, and while I am con- " fined, we ſhall not get it.—I " ſhould be very glad if you could " get them to promiſe under their " hands.

Yours, C. D.

After the receipt of this letter, A. B. was adviſed to rely upon the evidence reſulting from the letter, it being proved to be all of C. D's own hand writing, and ſtrengthened with proof of the ſtricteſt enquiry being made by A. B. after C. D. at his houſe and of his diſappearance and lying out from home at nights (though acknowledged to be in town) as legal proof of an act of bankruptcy, and thereupon to riſque the ſuing out a commiſſion of bankruptcy.

Accordingly, the 28th of June laſt, A. B. ſued out a commiſſion of bankruptcy againſt C. D. and the commiſſioners, without the leaſt doubt or heſitation, declared him a bankrupt upon the evidence before mentioned. But between the date of that letter and the *Teſte* of the commiſſion, it came out while C. D. diſappeared, that he was gone down to Kingſton upon Thames, to one E. F. his wife's father. Under pretence of his being indebted to him in 112l. or thereabouts, about 5 o'clock on the Saturday morning preceding the *Teſte* of the commiſſion, he calls an attorney out of his bed at Kingſton, and gets a warrant of attorney filled up, which he executed to his ſaid father in law.—Upon which judgment was entred up, and execution ſued out and levied the 25th of June, 1750, or the following day, upon the houſhold goods and ſtock in trade of C. D.

29th of June, the meſſenger to the commiſſioners took poſſeſſion of the houſhold goods and effects of C. D. but notwithſtanding the authority of the commiſſion, the ſheriffs officer acting under the execution forcibly carried off the beſt of C. D's working implements, and

alſo

alſo the choiceſt of his ſtock in trade, and ſold the ſame in ſatisfaction of the plantiff's debt at the ſum of 140l. although they were worth upwards of three hundred pounds.

Note, The commiſſion was in poſſeſſion before any bill of ſale was made by the ſheriff of the houſhold goods.—From the circumſtances of this caſe, the aſſignees under the commiſſion, who is A. B. is adviſed to bring his action of *Trover* for recovery of the goods taken and ſold under the execution.

Q. Who is the proper perſon to be made defendant in ſuch action? The plantiff in the execution, or the ſheriffs of London, or the officer who levied the execution, and if a demand in writing is neceſſary to be made of the goods before ſuch action is brought, and whether proof of the letter above ſet-forth to be the hand writing of C. D. ſtrengthened with proper evidence of his diſappearance from home, and of his confeſſion of his being a bankrupt the Thurſday preceding the executing of the warrant of attorney without expreſſing the nature and ſpecies of the act of bankruptcy he committed will be legal evidence of an act of bankruptcy from the date of the letter?

Anſwer.

If C. D. had appeared publickly, and gone on in his buſineſs, I ſhould have thought this letter would have been very little regarded, in order to prove him a bankrupt, but if evidence can be given that he had withdrawn himſelf from buſineſs, and kept concealed, I ſhould think that ſuch proof, together with the letter, will be ſtrong evidence of his being a bankrupt before the ſeizure under the execution. And it will be very proper to be prepared with the beſt account that can be had of A. B's enquiry after C. D. and his not being to be ſeen, and if poſſible to ſhew he was then in his houſe, or gone abroad to avoid ſpeaking to A. B. Theſe are facts, that if C. D. really abſconded, may by enquiry of ſervants, be eaſily made out, or ſuch circumſtances may be produced as will prove to a demonſtration his abſenting himſelf, and if that can be done, there ſeems to be but little doubt of ſucceſs. I think an action of *Trover* is proper, and if proof can be made of an actual removal of the goods, there will be no occaſion for a demand, and the defendants may be the plantiffs, the ſheriffs and the bailiff, and ſuch others as were concerned in removing the goods; and care ſhould be taken to have the proceſs produced on the trial, and to ſhew that the bailiff was an officer of the ſheriffs.

Middle Temple,
Nov. 26, 1750. J. FORD.

A Theorem of the Aberration of the Rays of Light refracted through a Lens, on Account of its ſpherical Figure, by the Rev. Mr. Nevil Maſkelyne, *F. R. S.*

LET the Form of the Lens aſſumed, in the Inveſtigation of the Theorem, be a Meniſcus, the Radius of whoſe convex Surface is greater than that of its concave Surface; and the Center of whoſe two Surfaces lies on the ſame Side of the Lens, as the radiant Point, from which the Rays diverge, that fall thereon. The Ray falling on the extreme Part of the Lens will, after Refraction, diverge from a Point before the Lens, nearer thereto than the geometrical Focus of Rays diverging

verging from the ſame radiant Point, and paſſing indefinitely near the Vertex.

Let Q expreſs the Diſtance of the radiant Point, before the Lens, from its Vertex; R, the Radius of the Concavity of the Surface, on which the Rays firſt fall; and r the Radius of the Convexity of the ſecond Surface; F, the principal Focus, or the Focus of parallel Rays, which will be on the ſame Side of the Lens, as the incident Rays, becauſe R, the Radius of the concave Surface, is ſuppoſed leſs than r, the Radius of the convex Surface. Let the Ratio of m to n be the ſame with that of the Sine of Incidence to the Sine of Refraction of Rays paſſing out of Air into Glaſs, and let Y expreſs the Semidiameter of the Aperture of the Lens; the angular Aberration of the Ray falling on the Extremity of the Lens, and another Ray or Line, ſuppoſed to be drawn from the ſame Extremity of the Lens, to the geometrical Focus of Rays diverging from the ſame radiant Point, and paſſing indefinitely near the Vertex of the Lens, expreſſed in Meaſures of the Arc of a Circle to the Radius of Unity, will be

$$\frac{m^3 - 2m^2n + 2n^3 \times Y^3}{m - n^2 \times 2m \times F^3} + \frac{mn + 4n^2 - 2m^2 \times Y^3}{m - n \times 2m \times F^2 r} + \frac{m + 2n \times Y^3}{m \times QFr}$$
$$- \frac{4n^2 + 3mn - 3m^2 \times Y^3}{m - n \times 2m \times QF^2} - \frac{2m + 2n \times Y^3}{m \times QFr} + \frac{3m + 2n \times Y^3}{2m \times Q^2F}.$$

where R, the Radius of the firſt Surface, is exterminated; and r, the Radius of the ſecond Surface, is retained.

Or, exterminating r, the Radius of the ſecond Surface, and retaining R, the Radius of the firſt Surface, the angular Aberration is likewiſe expreſſed by

$$\frac{m^2 \times Y^3}{2 \times m - n^2 \times F^3} - \frac{2m + n \times Y^3}{2 \times m - n \times F^2R} + \frac{m + 2n \times Y^3}{2m \times FR^2} +$$
$$\frac{3m + n \times Y^3}{2 \times m - n \times QF^2} - \frac{2m + 2n \times Y^3}{m \times QFR} + \frac{3m + 2n \times Y^3}{2m \times Q^2F}.$$

It may be proper to remark, that, as in theſe Theorems, the principal Focus is ſuppoſed to lie before the Glaſs, as well as the radiant Point, to adapt the Theorem to other Uſes, if the Lens be of ſuch a Form, as that its principal Focus lies behind the Glaſs, F muſt be taken negative: Likewiſe if the Rays fall converging on the Lens, or the Point, to which they converge, lies behind the Glaſs, Q muſt be taken negative: Laſtly, if the firſt Surface be convex, R muſt be taken negative; and if the ſecond Surface be concave, r muſt be taken negative; and if, after all theſe Circumſtances are allowed for, the Value of the Theorem comes out poſitive, the Aberration is of ſuch a Nature, as to make the Focus of the extreme Rays fall nearer the Lens before it, than the geometrical Focus, or farther from the Lens behind it: But if the Value of the Theorem comes out negative, the Aberration is of ſuch a Kind as to make the Focus of the extreme Rays fall farther from the Lens before it, than the geometrical Focus.

With reſpect to the Application of this Theorem to Mr. *Dolland*'s combined

combined Object-glaſſes, it is evident, that if the Aberrations of the convex and concave Lenſes added together (paying due Regard to the Signs of the Theorem), are made equal to nothing, the two Lenſes will perfectly correct one another: But as there are two unknown Quantities unlimited in the Equation, namely, the Radius of one Surface of each Glaſs (for F and Q are given, as well as *m* and *n*), there is room for an arbitrary Aſſumption of one of them, at the Diſcretion of the Theoriſt, or Artiſt; which being done, there will remain a quadratic Equation, whence there will reſult two Values of the Radius, which remains unknown, either of which will produce an Aberration equal to that of the other Lens.

To the AUTHOR *of the* GENERAL MAGAZINE.

SIR,

I Have found it a prevailing Notion in *England*, that the *French* ſcarce knew any thing of Brewing Malt Liquors, before the late Mr. Alderman *Parſons* taught them that Art, whilſt he reſided at *Paris*. Permit me therefore to rectify this Miſtake, by preſenting your Readers with an Abſtract of the Statutes relating to the Brewery at *Paris* made as long ago as the Year 1268 in the Reign of *St. Louis*, and which remain in force at this Day; ſome of which, I think, would be well adopted here.

1°. No one ſhall brew Beer, or remove it in Drays, or otherwiſe, on Sundays, or on the ſolemn Feaſts of the holy Virgin.

2°. No one ſhall ſet up in the Brewery, who has not ſerved a five Years Apprenticeſhip, and been three Years a Partner with a regular Brewer.

3°. Nothing ſhall enter into the Compoſition of Beer, but good Malt, and Hops well gathered, picked and cured, without any Mixture of Buck-wheat, Darnel, &c. To which end the Hops ſhall be inſpected by Juries, to ſee that they are not uſed after being heated, mouldy, damp, or otherwiſe damaged.

4°. No Beer Yeſt ſhall be hawked about the Streets, but ſhall be all ſold in the Brew-houſes to Bakers and Paſtry-cooks, and to no others.

5°. Beer Yeſt brought by Foreigners ſhall be inſpected by a Jury before it is expoſed to Sale.

6°. No Brewer ſhall keep in, or about his Brewhouſe, any Cows, Oxen, Hogs, Geeſe, Ducks, or Poultry, as being inconſiſtent with Cleanlineſs.

7°. There ſhall not be made in any Brewhouſe more than one Brewing of fifteen Septiers at the moſt, of ground Malt, in a Day.

This Article, I believe, is not kept up to.

8°. Caſks, Barrels, and other Veſſels, made to hold Beer, ſhall be marked with the Brewer's Mark, in the Preſence of a Jury.

9°. No Brewer ſhall take away from a Houſe he ſerves with Beer, any Veſſels which do not belong to him.

10°. Thoſe who ſell Beer by Retail, ſhall be ſubject to the Inſpection of Juries.

11°. No one ſhall be a Partner, but with a Maſter Brewer.

12°. No Maſter Brewer ſhall have more than one Apprentice at a Time, which Apprentice ſhall not be turned over, without the Conſent of a Jury.

There has been an exception to the former part of this Article for a few years paſt; a Man may now have two apprentices, provided

vided one of them commences his firſt year, when the other commences his fifth.

13°. No one ſhall take a Partner who has quitted his Maſter, without the Conſent of ſuch Maſter.

14°. A Widow may employ Servants in Brewing, but may not take an Apprentice.

15°. Maſter Brewers ſhall not entice away one another's Apprentices nor Servants.

16°. There ſhall be three Maſters elected for Jury-men, two of which ſhall be changed every two years.

17°. Such Jury-men, ſhall have a Power of inſpecting in the City, and Suburbs.

In *Paris* Beer is ſubject to pay a Duty, and that the King may not be defrauded, the Brewer is obliged, every Brewing, to give Notice to a Commiſſioner, of the Day and Hour he ſhall kindle the Fire of his Boiler, under Penalty of Fine and Confiſcation.

As the Buſineſs of Brewing cannot be carried on without employing large Quantities of Corn, it is uſual, in Times of Scarcity, for the King to put a Stop to it for a certain Number of Weeks.

Several Years ago there was a great Stir about the Brewers vending their Yeſt to the Bakers and Paſtry-Cooks, under Pretence that it was unwholeſome; but the medical Faculty of *Paris* decided to the contrary.

An Abſtract of Sir CHRISTOPHER MEIGHAN'*s* Enquiry into *the Cauſe of Heat in Bituminous Waters.*

MIX equal portions of ſpirit of vitriol, and oil of turpentine, or oil of amber; let them ſtand for ſome days to incorporate, then diſtil them in a retort.

What firſt riſes is a liquor nearly imitating *Petroleum*, in colour, as well as oily conſiſtence; and there remains a thick, bituminous ſubſtance, which, in time, becomes a hard, black maſs, inflammable, and of an odour like that of coals freſh dug.

But by continuing the diſtillation, and augmenting the fire, there next appears a white, acid liquor, whoſe ſediment is real ſulphur; and in the neck of the retort remains a yellow inflammable ſubſtance, every way anſwerable to common flowers of ſulphur.

What remains at the bottom of the veſſel, is a calcined maſs, containing ſome alkaline ſalt; which therefore is no *Caput Mortuum*.

In viewing ſuch reſults from a bituminous compound, by means of fire, we already perceive, not only a dawn, but even ſtrong light reflected on the objects of our enquiry; for, by numerous circumſtances, we are ſurely led to think that this univerſal agent, no leſs effectual when moving in its ſubterraneous dominion, exerts it's powers there on bituminous minerals, and, according to its force, exalts the petroleaginous, or the ſulphureous particles, which, with their ſteams and vapours, as waters circulate every where through the globe, are quenched in thoſe they meet, imparting thereto their degrees of heat and virtue.

If we extend our reflections, to the ſeveral claſſes of bituminous waters, and compare their various principles, as well as degrees of heat, with the different products of ſpirit of vitriol and oil of turpentine diſtilled together; as alſo the gradations of fire required for them, we may obſerve very intereſting and ſatisfactory parities.

Bareges-waters, of the claſs moderate in warmth, are indued with a

petroleum, analogous to that bituminous liquid which is raiſed by the firſt degree of fire in the ſaid diſtillation.

Thoſe of *Aix-la-Chappelle*, being hotter, abound in pure ſulphur, which is found ſticking to the roofs of their conduits, juſt as the flowers of ſulphur ſublimed by the ſecond degree of heat, adhered to the neck of the retort.

And *Borcet* fountains, the hotteſt of all, exhibit plain marks of a ſimilar conformity: for the ſediment, a calcined-like powder, imitating coal-aſhes, bears a reſemblance to what remained in the bottom of the retort, when the proceſs was finiſhed.

A further ſimilitude between the reſults of our diſtillation, and theſe ſeveral mineral ſources, is remarkable in their reſpective properties.

Thoſe of *Bareges* are unctious and mollifying, like a petroleaginous oil; thoſe of *Aix-la-Chappelle* are aperitive like ſulphur; and thoſe of *Borcet* poſſeſs aſtringent, tonic virtues, as calcined and alkaline ſubſtances do.

By all the preceding obſervations and reflections we muſt ſurely be induced to think that fire, operating in the bowels of the earth, by a ſubterraneous chymiſtry, produces different modifications of bitumens, juſt as we ſee is effected by a culinary fire, and proves the origin of thermal waters, with all their ſpecific variations.

It is already obvious, how they may receive their impregnations from contiguous burning mines of bitumen; and likewiſe very probable that its different ſublimations may produce their different claſſes, with a permanent regularity, ſince, as has been ſaid, experiment evinces that the igneous impulſe, which is capable of exalting the petroleaginous, cannot move the more weighty parts, charged with ſalts which compoſe ſulphurs; whence it follows that a force ſufficient to volatilize the latter, muſt diſſipate the former, when unconfined: and, of courſe, a further encreaſe of fire muſt expell, and ſcatter both, ſo as to leave only the calcined alkaline remains, according to the comparative examples in our diſtillation.

An objection may be drawn from hence, *viz.* that hot fountains of each claſs ſhould then be every where, and conſtantly the ſame. To which it is anſwered, that they are ſo, in regard of what conſtitutes their eſſential nature and appellation: for adventitious changes argue nothing to the contrary; variations, for example, in degrees of heat form no difficulty; it is enough that the ſpecific principles appear; the cool ſprings at *Bareges* are not, on the account of their being ſo, leſs of the petroleaginous kind: they muſt only be conſidered as weaker; and primitively, at the focus, their warmth was doubtleſs equal to that of the others; which decides enough.

But, I will endeavour to account for the ſundry alterations incidental to mineral hot waters, to remove the moſt ſpecious objections againſt this ſyſtem, and to explain points which have been deemed paradoxical.

Some waters forming ſeparate ſprings, though plainly derived from the ſame ſource, poſſeſs diverſe degrees of heat, as well as of virtues.

Such irregularities are plainly owing to cold ſtreams, which meet and mingle with thoſe veins, whoſe qualities are accordingly weakened or diminiſhed.

Others alſo, flowing in various branches, are all below the known ſtandard of their claſs, which is fairly to be aſcribed to cold waters falling into the main channel, or their having

having run ſo long a courſe from the place of their impregnation to the ſpot of their vent, that part of their virtues is loſt by the way; and it is doubtleſs by being exempt from theſe diſadvantages that the fountain at *Bareges*, named *le Grand-Bain*, proves ſo rich in petroleaginous principles.

Many, though warm, are almoſt inſipid, as thoſe of *Chaude Fontaine*, near *Liege*; the *Aquæ Geſtanæ* mentioned by *Strabo*; ſeveral at *Egeſta* in *Sicily*; at *Troas*, *Lariſſa*, *Melos*, and *Lipara*, ſpoken of by *Pliny*, with others taken notice of by *Fallopius*; all naturally rendered ſo by their gliding through long tracts of particularly abſorbent earths, and ſuch as are capable of intercepting their mineral principles.

There are thermal fluids which loſe their bituminous, and retain only their ſaline parts; as the *Aquæ Valderianæ* in *Italy*, and thoſe of *Bourbon* in *France*; becauſe their oil flies off, and their ſalts alone remain.

It is likewiſe eaſy to account for ſome containing different mixtures; as of ſteel, thoſe of *Bath* in *England*; of alum, the *Carolinæ* in *Bohemia*; of vitriol, thoſe of *Viterbo* in the *Campania* of *Rome*; or of ſuch other minerals as they happen to meet; for, by the powers of their heat, and their penetrating ſalts, they eaſily detach and carry along with them corpuſcles thereof, according to the quantities they can bear, or to the facility of entering their ores, which naturally depends on their growth, maturity, and compactneſs.

Further explications relative to bituminous waters, occur properly in ſolving the objections raiſed againſt the cauſe here aſſigned for their heat.

Thoſe who attribute this phænomenon to other agents, as motion, colliſion of different bodies, innate heat of the earth, influence of the ſun, an univerſal ſpirit, or others equally precarious and unwarrantable, oppoſe the following difficulties.

1. They deny the poſſibility of ſubterraneous fires that have no diſcernible vent; becauſe they cannot act without air.

It is juſtly allowed they cannot, but inſtead of an objection this is a very wrong ſuppoſition; for conſidering the ſubtlety of the air, and the penetrability of the earth, we cannot imagine any of its receſſes void thereof, nor can we doubt of its finding every where ſpiracles, ſince it pervades the minuteſt pores of the compacteſt bodies.

Moreover, as all the hot waters that we can have any knowledge of, have outlets, nothing ſurely hinders the much finer air's free ingreſs and egreſs thereby.

How pervious the earth is, is manifeſt from certain fountains, which, though very diſtant from the ſea, ebb and flow regularly therewith.

There are ſeveral of this kind, and particularly one in *Weſtphalia*, near the village of *Altenbacken*, about two hundred leagues from the *Baltic* ſea, which every day overflows the neighbouring fields at ſtated hours, and recedes accordingly.

2. It is added, that, ſuppoſing there were any ſuch fires, the waters would certainly extinguiſh them.

This aſſertion is againſt known facts; for bitumen burns readily amidſt waters, as appears from ſeveral tracts of ſea where it is ſeen flaming.

But granting this objection all its ſeeming force, it would carry little or no weight with it; for what could be the effect of the quenching powers of ſome aqueous ſtreams, paſſing amidſt mountains of bitumen, inceſſantly burning, and which probably

have fire diffuſed thoughout their vaſt regions.

3. It is alledged, that ſuch fires burning for ages, would long ago have exhauſted the greateſt ſtock of combuſtible matter ſuppoſed laid in for their ſubſiſtance.

I anſwer, that the great conſumption here imagined is to be deemed very inconſiderable in regard of the ſtores which provident nature affords.

Moreover, this difficulty will entirely vaniſh, if we turn our eyes to Mount *Ætna*, *Veſuvius*, and other volcanoes, whoſe flames date from very remote times, without any appearance of ending.

4. It is urged, that if ſubterraneous fires exiſted in thoſe receſſes whence hot waters proceed, they would at length have made their way out and ſhewn themſelves by eruptions.

And ſuch we own hath been the caſe in many places; as a view of *Iſchia*, *Pozzuoli*, and others about *Naples* plainly demonſtrate: nor ſhould we doubt of its proving the ſame in all, were the focus or fuel near the ſurface, as it probably lay in theſe mentioned, as well as in Mount *Hecla*, *Chimæra*, *&c.*

But it is reaſonable to conclude, that in theſe mountains whence hot waters iſſue, yet no fires are viſible, the bitumen lies numberleſs fathoms deep under reſiſting maſſes of clay and rock, by which the flames, heat, and vapours are reverberated, concentrated, and condenſed; nor can it be denied that marks are ſometimes perceived, which denote the burning contents.

5. Further it is argued, that if ſulphur were concerned in heating water, then all impregnated therewith would be warm; whereas there are contrary examples, as the *Geyſer* fountain near *Spa*, which, though ſulphurous, is extremely cold.

To explain and anſwer this, it ſufficeth to conſider, that ſulphur, though not inflamed, imparts itſelf to waters, and contributes to their quality of coldneſs.

6 M. *Blondel*, author of a treatiſe on *Aix-la-Chappelle* waters, remarks, that ſome in *Italy* and other countries, amidſt which bitumen is ſeen to flame, poſſeſs no great heat nor mineral quality, and that thoſe of the hotteſt claſs, as at *Borcet*, afford neither bitumen nor ſulphur; therefore he concludes that theſe combuſtibles have little or no ſhare in the heat of waters.

Firſt it is replied, that where bitumen burns in open view, it ſhould, on that very account, leave but little of its influence, becauſe it is exhaled, ſpent, and loſt in air.

Secondly, as to the fact that no bitumen nor ſulphur is found in ſome waters of the hotteſt claſs, look back to our diſtillation of ſpirit of vitriol with oil of turpentine, which ſhews by exemplary effects how ſubterraneous fires can decompoſe, modify, and ſublimate bituminous ſubſtances, till nothing remains but a calcined alkalious matter, like the ſediment of *Borcet* fountains.

M. *Blondel*, moved by ſo plauſible an objection, ſeeks another cauſe for the heat of mineral waters, and thinks he has found it in the effervescence of acids with alkalies: which, by exciting degrees of commotion and heat proportionable to their quantities, conſtitutes, in his opinion, the variety of hot fountains.

This idea, though ſpecious in chemiſtry, by ſuch inſtances as the ebullition of ſpirit of vitriol with oil of tartar, is very inſufficient for explaining the ſeveral *phænomena* attending thermal fluids; and is, moreover,

over, liable to the ſtrongeſt refutations.

1. Becauſe no account is made of the bitumen, which always interfering in ſome manner or other, communicates heat as often as the fire with which it is repleté, eſcapes from its cells or priſons, and is therefore more naturally to be deemed the efficient cauſe of hot waters, than an efferveſcence of ſalts, in every reſpect precarious.

2. No foundation can be laid for this hypotheſis, without having recourſe to ſubterraneous fires; for alkaline ſalts, being creatures of fire, cannot be imagined to exiſt in the bowels of the earth without its previous action.

3. If the heat of mineral fountains proceeded from an efferveſcence cauſed by ſalts, the degree would be in proportion to their quantities; and it would follow that every hotter water ſhould moſt abound therewith: but the contrary is manifeſt; for that of *Borcet*, notwithſtanding its exceeding great degree of heat, contains, as *Blondel* owns, no more than that of *Aix-la-Chappelle*, adding, that it is more terreſtrious, impure, and alkaline; proofs of the igneous operation.

4. It may juſtly be objected, that a ſupply of the requiſite acids and alkalies, ſo conſtant and equal as to maintain the even degrees of heat perceived in bituminous waters, is out of all probability: for ſuch a perpetual efferveſcence being of more complex circumſtances, conſequently its operations are more liable to diſorder than thoſe of ſubterraneous fires, and at the ſame time bear no compariſon in reſpect of their being adequate to the effects in queſtion.

Moreover, thoſe dreadful diſaſters, earthquakes, ſo frequent in our days, ſerve to confer a great degree of illuſtration on this ſubject; for they proceed from the violent agitations, and inteſtine efforts of rarified air, within hollow ſpaces, which concealed fires have formed; and this is ſo true, that igneous eruptions often attend ſuch convulſive ſtruggles; witneſs the great unhappy *Liſbon*, not more wrecked thereby, than deſtroyed by flames iſſuing from its foundations.

A full confirmation of what I have ſaid is, that the ground ſometimes ſubſiding, towns, mountains, and tracts of country, are precipitately buried in the horrid ruins, a new ſcene, generally of water, occupying the place. Of this we had a famous inſtance in the year 1638, when *St. Euphemia* in *Calabria* being ſuddenly ſwallowed up, a lake appeared in its ſtead: and there are two like terrible examples, one of *Lima*, and the other of a place in the kingdom of *Morocco*, in 1755, when our globe ſeemed, as it were, attacked by pangs through all its regions.

The thunder, which is heard to roar under ground, is likewiſe a proof of the operation of ſubterraneous fire; ſuch often ſtruck father *Kircher* with dread, during the great earthquakes of *Calabria*; and ſo vaſt are the ſpaces free for its exploſions, that once he judged it to have taken its riſe from a mountain ſixty miles diſtant from the ſpot where he ſtood, and perceived its gradual approach; whence he thinks there are communications between *Calabria*, *Ætna*, *Strombulo*, and other volcanos neighbouring on *Sicily*.

After all that is ſaid, with arguments to the ſame purport, which may be drawn from ſubterraneous winds, ſure no doubt can remain of there being ſufficient room for elaſtic particles of air to play, and hidden fires to ſubſiſt within the bowels of the earth.

I will add only one reflection more, that where-ever bituminous matter is found, with traces of ſubterraneous fire, there numerous hot ſources generally appear; as about *Solfatara*, *Baja*, *Iſchia*, *Miſenum*, *Cuma*, and the adjacent places, ever memorable for having been the favourite abodes of the moſt illuſtrious *Romans*, and themes of their immortal poets, but now remarkable for ruins which time and natural cataſtrophes have brought upon them.

By the foregoing ideas, which I ſubmit to the ingenious reader, I wiſh to have thrown ſome new light on ſubterraneous fires, as the cauſes of heat in mineral fountains, as well as on the proceſs, by which nature may be thought to produce their ſpecific variations; at leaſt they may ſerve as hints to others, who engage in theſe phyſical inveſtigations.

A dialogue between PERICLES, *a modern* GREEK, *and a* RUSSIAN. *By Mr.* VOLTAIRE.

PERICLES.

I Have a few queſtions to put to a modern *Greek*, and *Minos* has informed me that one of you is ſuch.

GREEK.

Minos has told you right; I was the moſt humble ſlave of the *Sublime Porte*.

PERICLES.

What ſay you? a ſlave! could ever a *Greek* be ſo?

GREEK.

Can a *Greek* be free?

RUSSIAN.

He's in the right: *Greek* and ſlave mean one and the ſame thing.

PERICLES.

Heaven! how do I pity my unhappy countrymen!

GREEK.

You are miſtaken; I was very well reconciled to my condition; I cultivated a ſmall ſpot of ground, which the Baſhaw of *Romelia* had the generoſity to grant me; for which, I payed tribute to *His Highneſs*.

PERICLES.

Tribute? How that word ſounds in the mouth of a *Greek!* But tell me; in what did this mortifying proof of your ſervitude conſiſt?

GREEK.

In reſigning up part of the fruit of my labour, the eldeſt of my ſons, and all my daughters that were handſome.

PERICLES.

What a Poltron! didſt thou deliver up thy own children to ſlavery. Did the cotemporaries of *Miltiades*, *Ariſtides*, and *Themiſtocles* ever——

GREEK.

I never heard of ſuch names in all my days. Were they Boſtangis, Capigi-Bachis, or Baſhaws of three tails.

PERICLES *to the* Ruſſian.

With what barbarous and ridiculous titles does this poor fellow torment my ears? I am undoubtedly talking to ſome ſtupid *Beotian*, or ſenſeleſs *Spartan*. *(To the Greek)* Surely you muſt have been acquainted with the name of *Pericles*.

GREEK.

Pericles?——Not in the leaſt—— But I believe one of our moſt famous monks was ſo called.

PERICLES.

Monk! what is that? I preſume the firſt perſon in the ſtate.

GREEK.

A monk has nothing to do with the ſtate, nor the ſtate with him.

PERICLES.

Then, by what means became he ſo famous? Did he, like me, fight and conquer for his country. Has he

he erected and conſecrated any monuments to the gods, the polite arts, the utility of the public, or or even the rational amuſements of his fellow citizens? Was he an encourager of merit, a patron of the learned?

GREEK.

No—The monk I mean, could neither write nor read; dwelt in a hut, laſhed his own ſhoulders the firſt thing he did of a morning, lived upon roots, and made an oblation to heaven of his flagellations, toils, abſtinence and ignorance.

PERICLES.

And you think that the renown of this man eclipſes mine.

GREEK.

To be ſure. We *Greeks* all reverence him to a man.

PERICLES.

Oh, Deſtiny! —— But however, am not I ſtill held in veneration at *Athens*, in that city where I introduced magnificence and true taſte?

GREEK.

I know nothing of the matter. For my part I am an inhabitant of a place called *Setines*, a pityful country town that has been running to decay time out of mind; though they ſay it was once a fine ſtately place.

PERICLES.

So you know as little of the illuſtrious and opulent city of *Athens* as of *Themiſtocles* and *Pericles*. Certainly you muſt have lived under ground, in ſome corner of *Greece*.

RUSSIAN.

No ſuch thing, he lived in *Athens* itſelf.

PERICLES.

In *Athens!* and not know me? nor ſo much as the name of that famous city?

RUSSIAN.

Thouſands and thouſands, know as little about *Athens* as he. *Athens*, the once proud *Athens*, is now no other than the louſy town of *Setines*.

PERICLES.

How! What is this you tell me?

RUSSIAN.

Such is the fruit of the ravages of time and the inundations of Barbarians, more deſtructive than time itſelf.

PERICLES.

I know very well that the ſucceſſors of *Alexander* ſubdued *Greece*; but did not *Rome* reſtore it to its liberty? Here I ceaſe my enquiries, leſt you ſhould tell me that it was loſt again.

RUSSIAN.

It has changed maſters ſeveral times. Notwithſtanding for a certain period it divided with the *Romans* the Empire of the world; an Empire which neither of the two Powers could maintain. But, to ſpeak of *Greece* only, it has born by turns the Yoke of the *French*, *Venetians* and *Turks*.

PERICLES.

Three barbarous nations which I never heard of.

RUSSIAN.

I can eaſily diſtinguiſh an ancient *Greek* by his language. All foreigners were *barbarous* in your eyes, without excepting even the *Egyptians*, to whom you owe the ſeeds of all your knowledge. I own, that formerly the *Turks* knew little elſe but the art of conquering, and not much more now, than to keep their conqueſts: But the *Venetians*, and eſpecially the *French* have equaled you *Greeks* in more reſpects than one, and ſurpaſſed them in others.

PERICLES.

A fine Picture this! but I take the man to be a little vain. Pray, friend, are not you a *Frenchman?*

RUSSIAN.

Nothing like it; I am a *Ruſſian*.

PERICLES.

Ruſſian! Sure the Inhabitants of the whole earth have changed their

names

names since my arrival in *Elysium*. I confess I never heard speak of the *Russians*: and yet your fund of Knowledge leads me to suppose your nation very ancient. Is it a remnant of the *Egyptians*, of whom you were saying such fine things just now?

RUSSIAN.

No. All I know of those people is from your own historians. As for our nation, we are descended from the *Scythians* and *Sarmathians*.

PERICLES.

And is it possible that one of the posterity of the *Sarmathians* and *Scythians* should know the state of ancient *Greece* better than a modern *Greek*.

RUSSIAN.

It is not above forty years at the most, that we have known any thing of *Egyptians*, *Greeks*, or *Sarmatians*. But one of our Sovereigns happening to be born a man of genius, took upon him to banish ignorance from his dominions; and arts, sciences, academies and publick spectacles quickly succeeded: we are become acquainted with the History of all people, and our history deserves the notice of other nations.

PERICLES.

I grant that to effect such sorts of metamorphoses requires nothing but resolution in the prince; but it is truer still that I have lost a world of time; I hoped to have rendered myself immortal, but find alass that I am not known in my own country.

RUSSIAN.

For your comfort, you are known in mine, which I dare say you never expected to be.

PERICLES.

I acknowledge it. Yet I cannot but regret that *Athens* should have forgotten every thing I had done for her. For my consolation I will go and visit *Osiris*, *Minos*, *Lycurgus*, *Solon*, and a multitude of Founders of Empires and Legislators, whose actions and precepts are sunk in oblivion as well as mine. Human knowledge is a Star which can illuminate only one part of the globe at a time, but shines successively on all; the day opening upon one nation, when it is closing to another.

The Natural History of Lapis Calaminaris, *or Calamine.*

LAPIS CALAMINARIS or Calamine, sometimes also called native Cadmy (to distinguish it from the Cadmy which adheres to the Sides of Furnaces,) is a stony Earth, which being mixed with Copper, produces, by the means of Fire, that metallic and malleable Substance called Brass.

It is found in diverse Parts of *Europe*, as *Germany*, *Bohemia*, *Hungary*, *Poland*, *Spain*, and *England*; the County of *Liege*, and the Environs of *Aix-la-Chappelle*, furnish it in great Quantities.

Henckel says in his *Pyritology*, that Calamine is usually found in fat clayey lands; and that there is no need of going very deep for it, as it often discovers itself immediately under the first surface; and sometimes forms the upper Stratum itself. It is likewise found mixed with metallic Minerals, particularly with Lead Ore, as may be seen in the Mines of *Goslar* and *England*.

Calamine is most commonly of an irregular Figure, with variety of Colours. Sometimes of a fine yellow Gold-colour, sometimes brown, again of a redish Cast, as is that of *Berry* in *France*.

The Sort which is compact and ponderous, is preferable to that which is light and spongy; when it is intermixed with whitish Veins, it is reckoned best of all. The *English* Calamine is mixed with a good

good deal of Lead; for which reaſon 'tis neceſſary to give it ſeveral Preparations before it is uſed for making Braſs.

Calamine contains an Earth which ſerves for the Baſe of a volatile and inflammable Zink, and what they call the Furnace Cadmy: The quantity of Zink which it holds, is a Mark of its Goodneſs, as likewiſe is the very ſmall intermixture of other Earths. Various other minerals are ſome times from their external appearance, miſtaken for Calamine. *Agricola*, with all his knowledge, has confounded with it a baſe Cobalt mineral, highly arſenical, called in *German*, *Fliegenſtein*. But the diſtinguiſhing Marks of *Lapis Calaminaris* are, to turn Copper yellow, and to hold Zink. The Rule of *Marggraf*, a learned Chymiſt of the Royal Academy of *Berlin*, is, that "whatſoever ſtone, being mixed "with wood-coal, and expoſed to "the action of a very violent cloſe "reverberatory Heat, does not pro-"duce Zink, or does not, in an "open Fire, make Braſs, when it "is mixed with Copper and Wood-"coal, is not Calamine."

However, the different Species of Calamine require ſome choice; for there are ſome which produce more Braſs with the ſame quantity of Copper than others. There are ſorts that give it a fine or a bad colour, and render it more or leſs malleable; which laſt, that which is mixed with Lead, is very apt to do; eſpecially that which comes from *Mendippe* Hills in *Somerſetſhire*; the ſame if it holds Iron, as that of *Bohemia* and *Berry*. Theſe never fail to make brittle Braſs, at leaſt if they do not undergo a previous reiterated torrefaction before they are mixed with the Copper. At the ſame Time there are others which may be employed without any preparation.

Henckel obſerves that one of the moſt remarkable Phenomena in Chymiſtry is the Union and Incorporation of Calamine, which is an Earth, with Copper, which is a Metal, without deſtroying its Malleability: And from thence he concludes that there are Earths which have the Faculty of being metalliſed. It is a fact that Braſs, whoſe Compoſition holds one third part of Calamine, may be as eaſily wrought as the beſt and pureſt Copper; this could not be if the Union were not perfect and of a very particular Nature, eſpecially conſidering that the Calamine may be afterwards ſeparated from the Copper, without the leaſt Alteration in that Metal.

The relation there is between Calamine and Zink, induced *Glauber* to call the latter, fuſible Cadmy: In reality, as has been obſerved, all good Calamine contains Zink, and may be juſtly conſidered as the Ore of that ſemi-metal. *Henckel* has taken notice that the *Bohemian* Calamine contains a ſmall quantity of coarſe Iron: It is mixed with a ferruginous Pyrites, called in German, *Eiſenſtein*; Vitriol of Iron may be obtained from it, and it has ſome Mixture of Alum. That ſkilful Mineralogiſt ſays, that many other Calamines are of the like nature.

Calamine reſembles Furnace Cadmy in four Particulars: 1. Like that it holds Zink. 2. It turns Copper yellow as that alſo does. 3. They have both an alkaline Earth for their Baſis. 4. They both excite an Effervescence with Acids.

The great Volatility of the Flowers of Calamine, and the Garlick-like Scent they raiſe, afford room for ſuſpecting that this Stone is moſt commonly mixed with Arſenic: Its Promptitude to inflame on Coals, or with Nitre, is a token that it contains a large Quantity of Phlogiſton. To the ſame cauſe may

be aſcribed its ready and violent Solution in Acids, its Concretion with Copper and moſt of its other remarkable Phænomena.

To the Lovers of Aſtronomy.

M. De la Lande, Lecturer Royal in Mathematics, Cenſor Royal, Member of the Royal and Imperial Academies and Societies of *Paris*, *London*, *Petersburg*, *Berlin*, *&c. &c.* has publiſhed at *Paris*, the beginning of this Month, a magnificent Work, entitled A Compleat Treatise of Astronomy *Theoretical and Practical, with a Set of New Aſtronomical Tables.* In two Volumes in 4to. each containing above 800 Pages, with 26 Copper-Plates.

The Body of this Work is divided into 24 Books, beſides the Tables. The Iſt contains the Elements of the Sphere, or the firſt Principles of Aſtronomy, and ſets forth for what Purpoſes the Circles of the Sphere and the Figures of the Conſtellations were firſt deviſed.

The IId Book contains the Origin of Aſtronomy and its Progreſs among the ſeveral People of the World; the hiſtory of the moſt famous Aſtronomers, as *Hipparchus*, *Ptolemy*, *Tycho*, *Kepler*, *Caſſini*, *Flamſteed*, *Halley*, *de la Cailli*, *&c.*

The IIId is a Deſcription of the ſtarry Heaven and the Conſtellations, the Origin of their Names, what number of Stars they are compoſed of, the Paſſages of the Poets which mention them, with an eaſy Method of knowing them without the help of a Maſter, or the Uſe of Charts or Globes, and an Account of new, changeable, double and nebulous Stars.

The IVth contains the eſſential Foundations of all Aſtronomy, or what relates to Aſtronomy in general, and is neceſſary to the underſtanding of the ſucceeding Books.

The Vth treats of the Syſtems of *Ptolemy*, *Tycho*, and *Copernicus*; the Evidence of which laſt is demonſtrated, and Father *Riccioli*'s ſeventy ſeven Arguments againſt the Motion of the Earth are refuted in the moſt ſatisfactory manner.

The VIth contains Planetary Aſtronomy; ſhewing how the revolutions of five of the Planets were diſcovered, with the determinations of different Authors.

The VIIth treats of the Motions of the Moon, her Phaſes, and Inequalities; of the Tables that have been publiſhed of them, and all the particular Circumſtances of that Planet.

The VIIIth contains an Explanation of the Calendar, ancient and modern; of Years, Cycles, Periods, Epochs; of Chronology, and its uſe in Aſtronomy.

The IXth treats of Parallaxes, of the ſeveral Computations depending on them, and of the curious Method whereby the Diſtances of the Planets are determined.

The Xth contains the Calculation of Lunar and Solar Eclipſes, and Eclipſes of the Stars; the ſeveral Methods which have been uſed to predict them exactly, explained at large; with a new one of the Author's, more ſimple and exact than any thing that has yet appeared.

The XIth, which begins the ſecond Volume, is a compleat Treatiſe of the Tranſit of *Mercury* and *Venus* over the Sun, with their Calculations, and the conſequences to be deduced from them. The importance of the Tranſit of *Venus* over the Sun, to happen in 1769, is particularly ſet forth, and how from it the diſtance of the Sun and all the reſt of the Planets from the Earth, may be inferred, to a greater de-

gree

gree of Preciſion than has been hitherto done.

The XIIth is about Aſtronomical Refractions, or the Deflections of the Rays of Light in paſſing through the Atmoſphere; whereby all aſtronomical Obſervations are affected.

The XIIIth is a very ample and particular Deſcription of all the Inſtruments now uſed in Aſtronomy in the moſt famous Obſervatorys of *Europe*; as Refracting and Reflecting Teleſcopes, Quadrants, Sextants, Sectors, Micrometers, Tranſit-inſtruments, Parallactic Inſtruments, Heliometers, &c. there are alſo given their Dimenſions, and their Figures on Copper-Plates.

The XIVth contains the Uſe and Verification of all theſe Inſtruments; that is, the way of obſerving all celeſtial Phænomena, the Attentions requiſite in the moſt accurate Obſervers; in a word, this Book is a Treatiſe of Practical Aſtronomy, compoſed by an aſſiduous Obſerver.

The XVth treats of the Magnitude of the Earth, its Figure or Oblateneſs; and contains the Hiſtory and the Reſult of the ſeveral Voyages appointed by the Academy, and of the Volumes which have been publiſhed on this Subject by Meſſrs. *la Condamine*, *Bouguer*, *Maupertuis*, *Boſcowich*, *Clairaut*, *Caſſini*, *de la Caille*, &c.

The XVIth ſets forth the Theory of the apparent motions of the fixed Stars, on account of the Preceſſion of the Equinoxes, and the Parallax of the Earth's Orbit: there is alſo explained the Effect of the Attractions of the Planets, which alter the Earth's Orbit, with the Diminution of the Obliquity of the Ecliptic, and the extraordinary Deviations with which different Stars are affected from particular Cauſes.

The XVIIth is a Treatiſe on the Aberration and the Nutation, being apparent Inequalities lately diſcovered in the fixed Stars.

The XVIIIth is the Aſtronomy of the Satellites, or the Hiſtory of the Planets which revolve round *Jupiter* and *Saturn*; their Motions, Inequalities, Eclipſes and Tables of them; which Theory has not yet been well explained in any Book of Aſtronomy.

The XIXth contains the Science of Comets. Here the Author deſcribes their Nature, Orbits, and Appearances; ſhews how to compute their Motions; gives the Hiſtory of the moſt remarkable ones, with their Elements, and Tables for calculating and predicting their Return.

The XXth treats of the Rotation of the Planets on their Axes, of their Figures and Spots; and ſhews how to determine the Solar Equator, to predict the Phaſes of *Saturn*'s Ring, and to compute and obſerve the Moon's Libration.

The XXIſt is a ſhort treatiſe of Conic Sections, of Series's, of the differential and integral Calculus, as far as they concern Aſtronomy.

The XXIId contains the Theory of univerſal Attraction, the Demonſtration of that Law, and the Inequalities reſulting from it; the famous Problem of three Bodies, and the Preceſſion of the Equinoxes deduced from Attraction.

The XXIIId contains Spherical Trigonometry, with differential or fluxional Analogies, of very great uſe in Aſtronomy.

The XXIVth is wholly about Aſtronomical Calculation properly ſo called; the way of computing the Celeſtial Motions from Obſervations; the Conſtruction of Aſtronomical Tables, and the Uſe of them; the Knowledge of Logarithms and Interpolations; how to deduce the Oppoſitions, Conjunctions and Places of the Planets from Obſervations. Laſtly, the Author has ſubjoined M. *de la Caille*'s Tables of the Sun, and M. *Mayer*'s of the

Moon as the beſt that are extant; to which he has made ſome Additions, to render them yet more perfect.

All this is the Fruit of no leſs than fifteen years Study, which M. *de la Lande* has conſecrated to the Celeſtial Science. In the Year 1751 he was choſen by the Royal Academy, to go to *Berlin*, and there make Obſervations for determining, by Compariſons with others, made at the ſame Time, by M. *de la Caille*, at the *Cape of Good Hope*, the Diſtance of the Moon from the Earth; and in 1759 he undertook the annual Labour of computing Ephemerides entitled *Connoiſſance des Mouvemens Celeſtes*, which he continues to do with great Applauſe.

CHARACTERS *of the laſt three biſhops of* London. *Being the ſubſtance of a late charge to the clergy of the archdeaconry of* Colcheſter. *By Dr.* MOSS.

AFTER calling to their attention the ſingular fate of the dioceſe of London, which has been deprived of three of its ſpiritual heads in leſs than three years, and two of them in leſs than one (not by way of making any ſuperſtitious deductions from theſe events, ſo ſingular as to be without example in the hiſtory of the ſee, from its firſt eſtabliſhment to the preſent time) the doctor proceeds in the following manner.

"The worthy prelate, Dr. Oſbaldiſton, who has juſt reſigned his breath, came to this high ſtation at an advanced age; and did not fill it long enough to be well known to his clergy, eſpecially in the more remote parts by his dioceſe. But, had his lot been caſt among us in the earlier part of his life, or had providence permitted him to continue his rule over us; the experience of a few years would, I doubt not, have convinced us, that a general knowledge of the world, and of buſineſs, a gentlemanly addreſs and deportment, a juſt ſenſe of his own dignity, and a becoming zeal for the intereſts of religion, are valuable qualities in a chriſtian biſhop, and would have made a worthy governor of a chriſtian church.

"The perſon, Dr. Hayter, who filled the epiſcopal chair immediately before him, came to it at a time, when his powers, both of body and mind, were in their vigour; but he had no opportunity of diſplaying them: his period was ſhort indeed.

Oſtendunt terris hunc tantum fata, neque ultra
Eſſe ſinunt.

But his abilities were ſuch, that had it been the will of heaven to indulge him with a longer date, it is not to be doubted but he would have done honour to the weighty charge, with which his majeſty was pleaſed to intruſt him.

"His accompliſhments as a ſcholar, and his talents for buſineſs, were well known to thoſe who lived in friendſhip with him, and had the beſt knowledge of letters and of the world; and, though the high ſtation he filled in the church for many years, and the honourable part he once had in the education of our preſent moſt gracious ſovereign, engaged him in a large acquaintance with perſons of the firſt conſequence, and a conſtant intercourſe of buſineſs with the great world, yet his hours of retirement were employed in ſtudy, and the converſation of thoſe who were moſt eminent for their parts and learning.

"The apoſtle reckons it an eſſential property in a chriſtian biſhop, to be given to hoſpitality; and no man

man ſtood higher than our worthy prelate in this part of the epiſcopal character: his doors were open, and his table acceſſible to all men of diſtinguiſhed knowledge in every branch of ſcience, and the liberal arts; and he had a pleaſure in contributing to the extenſion of ſociety and friendſhip amongſt perſons of worth and merit, and to the more free circulation and improvement of uſeful learning. His own knowledge of books and of the world, and more eſpecially an excellent taſte of the *Belles Lettres*, enabled him to appear with great advantage in ſuch a circle of literary friends; and on theſe, as on all other occaſions, he was peculiarly happy in leading the converſation, by an eaſy and familiar habit of varying the ſubject, of ſupplying freſh matter, when it ſeemed to be exhauſted, and ſupporting it with a ſpirit and vivacity that were natural to him, and ſerved to render even trivial ſubjects intereſting.

"Whilſt he was engaged in the important work of forming the mind and principles of our preſent excellent monarch, he ſtood foremoſt in the road of promotion of any man of his rank and order. But the charge he ſuſtained was delicate as it was weighty; and, though he had all the talents that were neceſſary to conduct it, with honour to himſelf, and advantage to his royal pupil, yet he fell on a ſudden under the reſentment and frowns of the court, in a degree that men of his profeſſion and order have ſeldom experienced; and what was worſt of all, the circumſtances of his caſe were ſuch, as threatened to perpetuate his diſgrace; and yet, after all, he had the peculiar felicity to be reſtored, in a few years, to the favour of his royal maſter, and left the world at a time when he had juſt received the ſtrongeſt proof of it. And though the favour of courts is precarious, and extraordinary turns of fortune will always depend on particular times and conjunctures, yet ſuch a change and [illegible]ation, after ſuch a diſgrace, [illegible]ld not be the work of fortune, without ſuperior merit to give weight and force to it.

"He took upon him the burthen of this great ſee, with a juſt ſenſe of the weight and importance of it. He conſidered the patronage annexed to it, as a ſacred truſt put into his hands, for the benefit of learning and religion; and I have often been told by thoſe who were moſt in his confidence and counſels, that it was the firm purpoſe of his mind, to acquit himſelf of that truſt in ſtrict conformity to the nature of it; and to fill the dignities and other great offices of his church and dioceſe, with men who were moſt diſtinguiſhed for their learning, their zeal for religion, and for our happy eſtabliſhment in church and ſtate. This plan of conduct, and theſe diſpoſitions of mind, joined to a liberal and munificent heart, afforded a fair preſumption, that, had it been the will of providence to lengthen his life, every thing might have been expected from him that was becoming the dignity of a great prelate, at the head of this moſt important juriſdiction in this proteſtant kingdom.

"I am glad of this opportunity of giving a public teſtimony of my reſpect for the memory of biſhop Hayter; who was truly worthy of the high rank he bore in the church, and was indeed one of the moſt reſpectable perſons of his order.

"But the perſon, whoſe hiſtory and character I would more particularly recal to your thoughts, is the great prelate who immediately preceded him; whoſe memory will be ever dear to thoſe who wiſh well

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to religion, and the eccleſiaſtical eſtabliſhment in this kingdom; and whoſe name will be honoured in future time, whilſt parts and genius, great talents and extenſive knowledge, with unſhaken integrity of mind and heart, continue to be reſpectable in the opinion of men. Ordinary parts are the growth of every time and place; and ſuch, with a timely and diligent cultivation, produce able and uſeful men in the different ſtations of life; but a genius is the product of an age; and it is the glory of the laſt age that it produced a SHERLOCK.

"From the firſt dawning of reaſon he ſhewed an eager thirſt for knowlege, and he took in the firſt rudiment of it at Eaton. Here he appied himſelf to grammatical learning under an able maſter; and laid the foundation of that claſſical elegance and correctneſs, which do ſo much honour to all his compoſitions.

"It has ſometimes been remarked, that fine parts freqently lye concealed, and are not to be developed by any art of education till a man is paſt his youth, and is advancing perhaps towards the middle of life; and there is a tradition which I have often heard, that this was the caſe of Biſhop Sherlock; but it is a tradition for which there is certainly no colour of truth: It appears from the teſtimony of thoſe who knew him in his early youth, that in that, as in all other parts of his life, he ſtood on the higheſt ground; that in the courſe of his education he was always at the head of his claſs, and never failed to lead his equals and companions, even in their puerile ſports and amuſements.

"From Eaton he was removed to Catharine Hall, in the univerſity of Cambridge, of which ſociety he was ſucceſſively choſen fellow and maſter; and was afterwards promoted to the office of vice-chancellor of that univerſity. Whilſt he was in this ſtation, no man was more attentive than himſelf to the buſineſs of it. The public records and archives had for many years lain in great confuſion; and he thought it an indignity to the learned body that papers and public inſtruments, of ſuch value and conſequence, ſhould continue longer in ſo confuſed and uſeleſs a ſtate: He examined them accordingly with great care, and reduced them into proper order; and the knowledge he acquired in the proſecution of this work, repaid him amply for his trouble. The conſtitution of the univerſity, in ſome parts of it, is not clearly defined and aſcertained, on account of ſome obſcurity and defects in its hiſtory, and by means of the different ſources from whence it derived its power and immunities; but, by the help of theſe archives, and other materials that fell into his hands, he acquired ſuch a knowledge of it, that, in the ſubſequent part of his life, he was appealed to as a kind of oracle, in doubts aud difficulties, that occaſionally aroſe, in regard to its juriſdiction and government.

"He was placed at the head of the two ſocieties of the Temple, as ſoon almoſt as he was of ſufficient age to hold a benefice in the church. Such a ſtation, at ſuch an age, to a man of ordinary parts, would rather have brought contempt with it, than reſpect; and indeed prejudices aroſe againſt him, on the ſcore of his youth, on his firſt deſignation to that office; but a ſhort trial of his abilities entirely removed them; his parts and judgment were ripe, and his knowledge was far beyond his years; he was duly ſenſible of the

the importance of his ſtation, and was the more diligent in improving the great talents that nature had given him, that he might not be wanting in any accompliſhment that was neceſſary to fill it with dignity.

" His ambition was equal to his parts; and he would have thought it an indignity to have been the ſecond in any character in which he choſe to appear. Young therefore as he was when he appeared firſt in the character of a public preacher, he ſoon ſurpaſſed the moſt eminent preachers of thoſe times, in ſolidity of matter, in ſtrength of reaſoning, and true pulpit eloquence.

" There are very few now living who are able to remember thoſe times; but, if general report and tradition did not ſupport me in this obſervation, there is a teſtimony that I can appeal to, which is above all exception; and that is, his own diſcourſes, which he was happily prevailed on to give to the public, a few years before his death*; and which, with very few exceptions, were all the product of his younger years. The reception they have met with, is a full proof of their merit; and I do but declare the judgment of the public, in ſaying, that, for variety and choice of matter, and the judicious arrangement of it, for ſtrength and ſolidity of reaſoning, for force and elegance of language, and for a natural flow of manly eloquence, they ſtand in the firſt rank of reputation of any theological diſcourſes in the Engliſh, or any other language.

To the Editors of the General Magazine.

THE chevalier d'Eon, at the time of his firſt coming over to England, was ſecretary to the duke de Nivernois, and a captain of Dragoons in the ſervice of his moſt chriſtian majeſty: the chevalier behaved with ſo much ſatisfaction to the duke, during that nobleman's reſidence in this kingdom, that, upon his departure for France, he exerted his intereſt in favour of his ſecretary to ſuch purpoſe, that monſier d'Eon was appointed miniſter plenipotentiary in his room.

In a little time after, however, the count de Guerchy being appointed ambaſſador from the court of Verſailles, the chevalier d'Eon received orders to reſume his former ſtation of ſecretary, and to act in the ſame capacity to this nobleman, in which he had officiated under the duke de Nivernois.—This order, it is ſaid, mortified the chevalier's ſenſibility; having acted in the quality of miniſter with acknowledged abilities, it was reported that he thought it hard to be reduced to the level of a ſecretary again, and hence, his enemies tell us, proceeded his quarrel with the count de Guerchy, by whom he was ſucceeded in that employ.

The chevalier's friends aſſign a different reaſon; but, be that as it may, he publiſhed ſoon after his rupture with the ambaſſador, a ſuccinct account of all the negociations in which he had been engaged, and expoſed ſome important ſecrets of the French nation in his work;† which excited the reſentment of their court: he was ordered home, but refuſed to comply with that mandate, from a fear of the conſequences.—This refuſal, it has been reported, gave birth to a deſign of ſeizing him by ſurpriſe, and carrying

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* Biſhop Sherlock's Diſcourſes are printed in Four Volumes Octavo.

† It was for a libel in this book, that he was lately tried in the court of King's Bench. See page 359.

ing him off much in the ſame manner as an infamous ſcheme was formerly executed on the unfortunate marquis de Fratteaux.

The chevalier himſelf ſeems apprehenſive of ſuch a fate, and has publiſhed ſome advertiſements, in which he relies intirely on the freedom and humanity of the Engliſh conſtitution.

By the laws of Great Britain, no man whatſoever, whether foreigner or ſubject, is to be deprived of his liberty without violating the laws of the land: theſe laws, if tranſgreſſed, are however only puniſhable in this kingdom, and we are by no means to ſend foreigners to other countries for any crimes they may have committed in this.—Such a procedure would at once lay the axe to the root of our freedom and dignity as a nation, and furniſh a precedent to every little ſtate in Europe to call us to an account.

Letter ſaid to be from Mr. D'Eon to His Excellency WILLIAM PITT, Eſq;

SIR,

London, June 21, 1764.

THE Engliſh nation ſeems to conſider the idea of your Excellency as inſeparable from that of Liberty; the one ſeems to owe its exiſtence to the other. What impreſſion then muſt it not make on you, Sir, when I acquaint you, that this liberty, which I flattered myſelf to enjoy the ſweets of in tranquility, is menaced with the moſt daring outrage? Every ſtranger reſiding in London, who conforms to the laws, is, agreeable to the conſtitution, entitled to the protection of thoſe laws.—Who can, with truth, accuſe me of having, voluntarily, or involuntarily, infringed the leaſt part thereof; I endeavour to live in harmony with every body; I contract no debts; I pay ready money even for the minuriæ of what I want; no one therefore can have any legal demand on me. Might not I expect, that by ſuch a cloſe adherence to the laws, my perſon ſhould be in ſafety? Yet, ſo cruelly am I circumſtanced, that I cannot go out without danger of being carried off by violence, or reduced to the neceſſity of oppoſing force to force. Were the former to prove my fate, I ſhould be delivered into the hands of powerful enemies, actuated by revenge, ſo much the more furious as their pride has ſuffered from the publication of their ſhame and ignorance. I am bound, therefore, to employ the utmoſt reſources of foreſight and courage to avoid it; but in this laſt caſe, am not I in conſtant apprehenſion of infringing the laws, which condemn every ſort of violence, though warranted by nature? This, Sir, is the cruel alternative that perplexes me. The ambaſſador, finding the law cannot be warped to ſerve his unjuſt reſentment, means to violate it in attacking the national liberty: there is arrived here, purſuant to his orders, ſeveral exempts, or officers of the police of Paris, who keep a boat betwixt the bridges of London and Weſtminſter, which, if they can ſeize me, I am to be forced away in as far as Graveſend, where a ſmall veſſel is waiting, with twenty or more armed men on board, commiſſioned to deliver up a victim, whoſe attachment alone to the honour of his King and Country conſtitutes his crime.

Methinks I ſee the effect this villainous project produces on your Excellency; patriotiſm, juſtice, honour, and compaſſion, are moved in my behalf. How happy ſhould I be, in relating my misfortunes to you

you *viva voce*, and receiving your ſalutary advice! which would increaſe my gratitude, but could not add to the infinite reſpect with which I have the honour to ſubſcribe myſelf, Your Excellency's

Moſt obedient humble Servant.

Letters to the ſame purport were ſaid to be alſo ſent to the right honourable lord MANSFIELD, *the right honourable the earl of* BUTE, *and the right honourable the earl* TEMPLE.

The name of PITT is, in England, the glory and the ornament of the country, in the ſame manner as *Cato*'s name was in Rome, when the Roman Republic was in its higheſt degree of ſplendour; *Cato* could not outlive *Liberty*, nor *Liberty* outlive *Cato*: The former, as well as the other, deſerves, and ought to be looked upon as the intrepid aſſertor of the Engliſh Liberty.

Habeat jam Roma pudorem
Tertius è cœlo cecidit Cato.

Hints and Obſervations for the Improvement of Agriculture.

Continued from Page 334.

The methods of making ſolid and comby pot-aſh.

THERE are very conſiderable quantities of foreign aſhes, imported into this kingdom from Ruſſia, Spain, &c.

But we have only two kinds of aſhes made in our country, viz. *ſolid*, or *hard*, and *comby*, or *light* aſhes, and both in demand for home conſumption.

The ſubjects, of which the different kinds are made, are as follow.

Wood-aſhes, which are principally made in farm-houſes, &c. where wood is burnt as fuel, are bought up by the pot-aſh burners, from ſix-pence to eight-pence, and ſometimes ten-pence, *per* buſhel, corn meaſure,* and carried to the pot-aſh office, in which are erected large fats, or vats, (containing from four to eight ſcore buſhels of wood aſhes) with under-becks, and are wrought by threes; ſo that there are either three, ſix, or nine vats in every office, and for this reaſon:

The aſhes being trod down into the vats, a ſufficient quantity of water is continued to be laid on till it runs through the aſhes into the under-beck. The liquor running from the firſt is laid on the ſecond vat, which is one third ſtronger than the firſt; and the liquor of the ſecond vat is laid on the third, which is alſo one third ſtronger than the ſecond. When it has thus run through the third vat, the lees, as the liquor is then called, is ſuppoſed to be ſtrong enough for burning; but the ſtrength is proved by weighing the lees in ſmall quantities.

The lees thus made is then put into a ciſtern, or caſk, ſet into the ground level with the floor of the office, in which a perſon is employed in ſteeping of ſtraw for the burner, till all the lees are ſucked up. At the ſame time another perſon is employed in burning that ſtraw, ſo taken out of the ciſtern; which burning will produce either ſolid or light aſhes, whichſoever the intention is to make.

Now to make ſolid aſhes, the lee muſt be made as before deſcribed; and

* Wood-aſhes in Eſſex are bought up for this purpoſe at five-pence to ſeven-pence per buſhel.

thoſe lees ſhould be burnt up with peas or bean ſtraw only. But to make light or comby aſhes, (of which we make by much the greateſt quantity, and of this kind of aſhes, the fineſt in the kingdom) the lees ſhould be made as before, with this difference only; they muſt be ſtronger, and inſtead of peas and bean ſtraw, it would be better to burn barley, wheat, and clover ſtraw, mixed with a little peas ſtraw.

After the vats are run through the third time, they are emptied, and the aſhes, which are called pot-aſh muck, make excellent manure for ſome kinds of ſoil, particularly cold, and the looſe woodcock ſoil.

From this manure there have been prodigious crops of corn, eſpecially peas, and from the following method:

After the peas are ſet, pot aſh muck has been caſt by hand over the land, and afterwards run over with a buſh-harrow, which fill up the holes, or cavities in the land, with the aſhes; and this has never been known to fail.

The principal inducement to make pot-aſh is, for the muck; and this is evident from an obſervation often made, that no body makes pot-aſh but thoſe whoſe land requires ſuch manure.

A farmer in the county of Eſſex, who rented about two hundred pounds a year, and was thought to pay ſo dear for his land, that his neighbours concluded he would not hold it long; yet, to their great ſurpriſe, he had better crops than any of them, and in the ſpace of fifteen or ſixteen years got a pretty fortune; all which ſucceſs he, with great juſtice, attributed to a pot-aſh office he had erected on his ground. It is alſo remarkable, this farmer's land was clear of weeds, when the neighbouring fields were choaked up with them. He found the pot-aſh muck agree with any crop on his land, which was rather ſtiff and cold, though good wheat land when properly tilled. He had amazing crops of barley, but he almoſt always ſowed his barley on a good fallow, and a fine tilth.

Horſe-Stale, &c. recommended to be preſerved for Manure, by an Inn-keeper.

I Cauſed ſome years ago, in the loweſt part of my inn-yard, a large reſervoir to be dug, twenty feet ſquare, and fourteen or fifteen feet deep. The ſoil in which this was dug being rather porous, I had it lined with wet clay, as if I had been making a fiſh-pond, and afterwards lined throughout with hard bricks, ſet in terrace mortar.

When this was done, I had the drains from all my ſtables, and my cow-houſe, conducted to this reſervoir, as well as a capital drain from my kitchen. The reſervoir was covered over with ſome ſtout beams, and thick oken plank; an aperture being left, wherein to fix a ſtrong pump

By this contrivance I preſerved the horſe-ſtale made in the ſtables, which was very conſiderable in quantity, as well as all the pot liquor, brine, ſuds, and chamber-lye, made in my houſe.

This compoſt is my beſt manure; but it requires ſome little caution in uſing it.

I apply it to all my crops, indiſcriminately, and find it ſucceed; the only danger being the over-doing it. When I lay on this manure, I get the water-cart firſt half filled with pond water, and then, bringing it to the pump above mentioned, complete the filling it with the contents of the reſervoir: this I find a good method of correcting the great heat of the manure in queſtion, which would of itſelf, in particular ſeaſons, be apt to burn ſome crops.

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I find this manure to be of particular ſervice to me in procuring a large burthen of graſs in my upland paſtures, and even in my meadows; but in all my graſs ground I begin laying it on immediately after Chriſtmas, and have completed the dreſſing before the end of February. I find this the beſt ſeaſon for doing it, on many accounts, particularly, as the ſpring-rains, ſoon ſucceeding, waſh off from the blades of the graſs the ſaline particles, which would otherwiſe be diſguſtful to the cattle.

I dreſs my wheat with this manure, in the month of April; remembring always to correct the heat of it with water, as is above noted.

On my barley I ſprinkle it generally in May, and find theſe methods ſucceed well.

The manner of my ſprinkling this manure, is as follows:

At the tail of the water-cart I have two leather pipes fixed, about four feet long each. At the end of each of theſe pipes is fixed a tin roſe, ſomewhat like thoſe uſed on watering-pots. Theſe roſes are faſtened with ſome ſtrong rope-yarn to the two ends of a ſtout ſtick, which keeps them about half a yard aſunder: to the middle of this ſtick is tied one end of a ſtrong line, about two yards long.

When the cart comes into the field the horſes are put into the track they ſhould go in, and if they are handy, and are uſed to the buſineſs, they will go in a ſtraight line, or, if they vary, be eaſily ſet right by a word from the boy behind the cart. This boy, as ſoon as the horſes move forward, takes hold of the rope above mentioned, and by means of it keeps ſwaying the roſes from ſide to ſide, and thereby ſprinkles the land to a conſiderable width, at leaſt twice the width of the watering-cart.

My reaſon for preferring this method is, that my land is leſs trod, and my crop leſs damaged, by it, than it would be by fixing a perforated trunk at the cart's tail, as, in the laſt mentioned method, only one width of the cart is ſprinked in one turn.

I find many advantages in this manure, to the uſe of which I am ſo infatuated, as my neighbours term it, that I lay no yard-dung on my land, but ſell all that I make in my ſtables to the farmers who prefer it; and by this means I raiſe a good ſum every year.

Were you to look over my land, which is under two hundred acres, you would be pleaſed to ſee how clean it lies, and how clear it is of weeds; though, when I firſt took it into my hands, which is about fourteen years ſince, the crops were almoſt devoured by them, and the ſoil greatly impoveriſhed.

I therefore conclude, that the cleanneſs of my land is owing to my never uſing yard dung as a manure, which always contains numberleſs ſeeds of weeds; and the goodneſs of my crops cannot be attributed to any thing but the conſtant and almoſt invariable effects of the contents of my reſervoir, eſpecially if we add, that I am no ways deficient in taking care that my lands are at all times properly tilled, and ſeaſonably huſbanded.

So much for the effects of this manure on my farm. I am now to inform you, that I receive, in proportion, as much benefit from it in my kitchen-garden, where I alſo refrain from the uſe of yard-dung, inſtead of which, when the ground is trenched and thrown up in winter, I give it a thorough dreſſing with the manure ſo often mentioned.

This, by the ſubſequent digging, when the land comes to be levelled, is well mixed with the ſoil, which

never fails yielding me plentiful crops of pulſe and kitchen ware; and what is more, my cabbages, beans, peas, &c. are much ſweeter than thoſe raiſed in my neighbours gardens, which are annually enriched with abundance of rotten horſe-dung.

I cannot help, on this occaſion, mentioning one garden crop, which is, in a very particular manner, adapted to receive ſuperior benefit from this manure: the crop I mean is onions, which come much earlier with me than my neighbours, and are larger and ſweeter than any I can procure in this country, or have ſeen elſewhere, thoſe imported from Portugal excepted.

Another great benefit I receive from this manure in my garden reſults from ſprinkling with it my aſparagus beds, as by this means the plants appear earlier, the heads are larger, and not a bit leſs ſweet, than thoſe raiſed in the natural earth, without any manure whatever. This is a conſiderable advantage; as I annually experience it; and it often gives me ſingular pleaſure to provide my travelling cuſtomers with a diſh of aſparagus a week, or perhaps ten days, before they can be procured at any inn within thirty miles of the town where I live.

I find this manure alſo of great benefit to my fruit-trees, as well ſtandards as thoſe which are planted againſt walls, or eſpaliers; but to uſe it in this intention requires great caution, for, when I firſt tried it, I killed three or four fine thriving young trees by applying it too ſtrong: ſince that time, when my fruit-trees require nouriſhment, I mix three parts of pond water with one of the contents of my reſervoir above deſcribed. Vines will, however, bear it a great deal ſtronger; for I have ſeveral times applied this manure to them, even unmixed with water, without ſenſible injury.

Remarks on mowing Wheat, with a method of ſecuring it from damage in the Field when cut.

A good deal hath been ſaid about mowing wheat, and even much encouragement given to bring that method into practice; which indeed, where labourers are ſcarce, and the corn not fully ripe, may be of ſome ſervice to expedite the work without much loſs to the farmer; but when hands can be procured, and the wheat fully ripe, there is no method will ever exceed that of hand-reaping, if decency, ſaving, and diſpatch, be conſidered as going hand in hand; but if diſpatch be the only thing aimed at, mowing muſt be preferred, though not in a very great degree.

In order to illuſtrate this matter, it may not be improper to lay down a calculation of the coſt and loſs attending the mowing and binding, and alſo of reaping and binding, one acre.

For this purpoſe we will make choice of a piece of midling wheat, ſay of 25 buſhels on an acre, which may be cut with hook or ſickle, and bound for 5s. 6d. without meat or drink. With the ſcythe it will coſt 2s. cutting, gathering and binding 2s. and raking 1s. which makes 5s. ſo that 6d. is ſaved in price.

But then let the reader conſider, that a conſiderable quantity of corn is ſhook out by the ſudden ſtroke of the ſcythe againſt the ſtraw, and trod out by the feet of the gatherer, beſides many ears being at the butt of the ſheaf, which muſt be expoſed to the dampneſs of the earth when ſet up in ſtook, if it happens to be ſerved in that manner, and thereby very liable to grow, which, if it be a moiſt harveſt, muſt be the caſe; for

for which waſte and growing, 6d. per acre is but a moderate allowance.

From this there appears not any thing to be ſaved by mowing an acre, in which work three perſons are employed for a day, *viz.* two men to cut and bind, and a woman to rake; when, in the hand-reaping, the like number of hands, all men, will do the like quantity of work in a much neater and more ſaving manner; the corn be laid regular in the ſheaves, and more free from ears in the butts of them, and conſequently leſs liable to be mixed with grown corn, by its being ſtooked in a moiſt ſeaſon.

The following method is practiſed by many farmers in the county of Glouceſter for ſecuring the wheat in the field from damage by wet after it is cut and bound.

They frequently procure a ſlide, to be drawn by one horſe, made of two poles about ten feet long, each fixed in the manner of a thill for a waggon, by five or ſix croſs bars faſtened by their ends in each of the poles, near the greater ends of them, but not ſo near the ends as to hang in the clods when drawn by the horſe, which is placed between them as in a thill: bearing on the hindermoſt of theſe croſs bars is a tail ladder, in manner of thoſe affixed to carts.

Being thus provided, a ſtoutiſh lad loads on this ſlide from twenty to thirty ſheaves or more, and with the horſe draws them to ſome convenient ſpot, frequently the headland, and there unloads them; repeating the practice till there be thirty or forty tything brought together.

When this is done, and ſometimes while doing, two men are employed to ſtack them up in the following manner.

They lay four of theſe ſheaves croſs each other, the ears or crop of one reſting on the middle or band of another; by which means the ears are preſerved from the ground: then one of theſe men, kneeling on one knee on the crop of theſe ſheaves, and ſtanding with the other foot on the butts of them, proceeds to lay other ſheaves in a circular manner, being ſupplied by the other man with them, at the ſame time letting the butts of the ſheaves in each ring project a ſmall matter, till he is gotten about four feet from the ground, when he is carefully to lay every ring ſhorter than the other, till he has brought the ſtack or mow to a vertix, the laſt laying, or ring, containing not more than ſix or eight ſheaves, and thoſe ſmall, made purpoſely; on which, at laſt, a ſheaf of longiſh ſtraw wheat, and of midling ſize, being bound near the butt-end for that purpoſe, and the ears ſpread in a circular manner, is placed as a cap or hickler to defend the others.

After which they frequently ſhear down the mow, thus made, with a reap-hook, and carry the ſhearings to put under the bottom of the next ſtack.

The corn being thus ſecured may remain for months, and receive no damage from rain, or while the hands are employed in getting in the other ſorts of grain, which may not be ſo conveniently left in the field.

As they generally bind their wheat as faſt as it is cut, allowing one binder to two reapers, they carry it, and mow or ſtack it in this manner, the ſame day; weeds being no obſtruction, as the butt-ends of the ſheaves are expoſed to the air, and very rarely any ſheaf is put in the middle of the mow.

They generally put about a waggon-load in one of theſe ſtacks; and two men, and a boy with his horſe

horſe and ſlide, will carry, and mow or ſtack, eight or more waggon-loads in a day.

A method, practiſed in Berks, of draining upland grounds that abound in ſprings.

The trenches made for draining theſe grounds, are dug two feet deep at leaſt, one foot wide at top, and only nine inches wide at bottom, with a ſharp deſcent to a ditch running along the bottom of the grounds, and made of a proper width and depth to receive the water, and convey it off the premiſes.

Within theſe trenches is formed a channel, the ſides whereof are compoſed of pieces of hard, white chalk cut nearly into the ſize of a brick, which they cap with other pieces of the ſame material, and the crevices are ſtopt with ſome of its chippings. But the mouth of the channel, from whence the water falls into the ditch, is made with other materials, either bricks or flints, becauſe chalk will not bear the froſt, which, if put at the mouth of the channel, it would be expoſed to.

Upon the top of the channel is laid a thin coat of wheat-ſtraw.* The paſſage for the water is ſomewhat more than three inches. The price of digging the trenches, laying the chalk, and finiſhing the drains, is eight-pence per pole.

Permit me to obſerve, that in digging the trenches, the workmen always lay the beſt earth on one ſide by itſelf, in order that it may be put uppermoſt when the trenches are filled up again.

None of the drains ſo made in this pariſh have ever yet failed, though ſome of them have been made many years, and we may almoſt venture to ſay, that if they be carefully executed, and attended to afterwards, they never will fail.

Mus. Rus.

The Uſefulneſs of Ants at Surinam.

MR. Homberg read a letter to the members of the royal academy of Sciences at Paris, which he had received from Paramaribo, in the province of Surinam, on the north coaſt of ſouth America. Paramaribo is a Dutch colony. This letter contained a ſingular remark with regard to natural hiſtory. There are in that country ants, which the Portugueſe very juſtly call viſiting ants; they march in troops, and like a great army. As ſoon as they appear, all the coffers, and all the cheſts of drawers in houſes are opened for them, they enter and exterminate rats, mice, cackerlacs,† which are a kind of inſects in the country, and all noxious animals, as if they had a particular commiſſion from nature to puniſh them, and rid men of them. If any one was ſo ungrateful as to moleſt them, they would fall upon him and tear in pieces his ſtockings and his ſhoes. The misfortune is that they do not keep, as one may ſay, their days of paying viſits often enough; they would be welcome every month, and they do not appear ſometimes for three years.

Having

* Perhaps it might be found better, in point of duration at leaſt, if, in the ſtead of wheat-ſtraw, the ſmall twigs, cut from the ends of ſpray faggots, were uſed, or, in fact, almoſt any other ſmall bruſh wood, or even brambles, any of which would, we apprehend, be leſs liable to be damaged by wet, or froſt, than wheat ſtraw.

† See Page 158.

For the General Magazine.

Having (See p. 289.) *inſerted a memorial diſpatched by expreſs from the Bay of Honduras to Jamaica, to ſolicit the aſſiſtance of governor Lyttleton; for extricating the Baymen out of their difficulties, the following extract of a letter from Mr. Lawrie, to Meſſ. Forſter, Maud, and the Gentlemen of the Bay committee, will ſhew the reſult of that memorial.*

YOUR diſpatches to Governor Lyttleton, and your letter to me, dated the 28th of February, by Capt. Belfour, I received, who arrived here on the 27th of March; I immediately waited on Governor Lyttleton, and delivered them. I repreſented to him, in the ſtrongeſt manner, the diſtreſſes of his Majeſty's ſubjects in the bay, and the miſerable ſituation they were reduced to, by removing their families and effects into a river, in a manner deſerted; expoſed to the inclemency of the wether, without a hut to cover them: In ſhort, I painted your diſtreſs in the ſtrongeſt manner I was maſter of, and uſed every argument in my power, in order to incite him to give you immediate relief.

His reply to me was, that he had no inſtructions from the miniſtry, with regard to the bay of Honduras: That he was very ready to do any thing in his power for their aſſiſtance, and aſked me what method I thought the moſt ſpeedy he could take for their relief; I told his Excellency, that a ſhip of war was, I thought the moſt ſpeedy and effectual method; he thought that to precipitate a meaſure, and did not apprehend that the Spaniards intended any violence. I told him I knew no greater hardſhips that could happen to a ſubject, or ſo dreadful, as being driven from their habitations. I then aſked him to ſend an officer to ſignify to the Spaniſh Governor and commandant, that the inhabitants were his Britannick Majeſty's ſubjects, and had ſettled in conſequence of the treaty of peace. He ſaid that he had ſent down an officer as as ordered by his Majeſty that was not returned: That he had no fund to pay any officer on ſuch ſervice, conſequently could not command one without pay. I engaged in your behalf, to pay the expence, which he ſaid he could not take upon him, having no inſtructions relative to the bay.

I then offered to carry his diſpatches, if he would give me inſtructions, but ſaid he would write to the Governor of Jucatan, and repreſent your ſituation to the miniſtry at home. I left him, and waited upon him according to his appointment, to receive his diſpatches, which I have got, and returned, and related what happened to Mr. Hall, and ſome others of my friends. Not thinking his Excellency's letters ſufficient (from what he had related to me) to anſwer the urgency of your affairs, was adviſed to apply to the Admiral; accordingly got a friend of mine, and an acquaintance of the Admiral's, to wait upon him: He ſeemed inclined to give his aſſiſtance; I then ſet about drawing a petition, to be ſigned by merchants, which was preſented to them on the 10th inſt. I cannot pretend to ſay with any certainty, whether we ſhall be able to procure a ſhip from the admiral or not, which has determined me to ſend you Governor Lyttleton's letter of diſpatches, to the Governor of Jucatan, which, if it has no other effect, will prevent you from being inſulted till ſome remedy appears. (*See* p. 360.)

To the Editor of the GENERAL MAGAZINE.

SIR,

A candid narrative of what has been tranſacted ſince the concluſion of hoſtilities, in order to preſerve to this nation the ſtipulated right of cutting logwood; by which it will appear, that inſtead of violating this treaty, the Spaniard have proceeded according to ſuch meaſures as are abſolutely neceſſary for preſerving this beneficial branch of commerce to this realm alone, will be agreeable, I hope, to every Engliſhman.

ARTICLE XVII.

"HIS Britannic Majeſty ſhall cauſe to be demoliſhed, all the fortifications which his ſubjects ſhall have erected in the bay of Honduras, and other places of the territory of Spain in that part of the world, four months after the ratification of the preſent treaty; and his catholic majeſty ſhall not permit his Britannic Majeſty's ſubjects, or their workmen to be diſturbed or moleſted, under any pretence whatſoever, in the ſaid places, in their occupation of cutting, loading, and carrying away logwood: and for this purpoſe they may build without hindrance and occupy without interruption, the houſes and magazines which are neceſſary for them or their families, and for their effects: and his catholic majeſty aſſures to them, by this article, the full enjoyment of theſe advantages and powers on the Spaniſh coaſt and territories, as above ſtipulated, immediately after the ratification of the preſent treaty."

In this manner, at the eaſy purchaſe of the demolition of what are called fortifications, built by Buccaneers and Pirates, contrary

contrary to the law of nations, and never pretended to be garriſoned by the troops of this crown, we have acquired the long-diſputed right of cutting logwood: an acquiſition of more conſequence to the commerce of this nation, than all that was obtained by the treaty of Aix-la-Chapelle.

Such being the advantage of this article of the treaty, it became neceſſary to ſtipulate ſome farther meaſures by which this acquiſition might be preſerved to us alone. The manner in which this has been effected ſhall be ſhewn from thoſe very papers, by the evidence of which it is aſſerted, the treaty has been violated on the part of Spain.

It is evident from the petition of logwood cutters to Governor Lyttleton, (*See p.* 289.) that, from the month of April laſt year, to the fourth day of February in this, they had remained undiſturbed in the occupation and poſſeſſion of all that had been ſtipulated by the treaty of peace; and that the ſuſpenſion of their logwood cutting had been in conſequence of a letter, of the 29th of December, written to Joſeph Maud by Phillipe Remires d'Eſtines, Captain-General of Jucatan, who had arrived at Campeachy the 7th of the ſame month. Before the arrival of this Spaniard, the letter of the ſeventeenth article had been ſtrictly obſerved on the part of his countrymen in America: but as ſomething relative to ſecuring this trade to the Engliſh, and preventing the Spaniards from being impoſed upon, by pretenders to the rights of Britiſh ſubjects, had been foreſeen to be abſolutely neceſſary to be eſtabliſhed, that ſtipulation had been agreed on between the crowns of Great Britain and Spain; and, according to Don Remire's words, it conſiſted in obliging the logwood-cutters either to be furniſhed "with the royal ſchedule which Spain had expedited to this end, or with the licence of the King of England, for the aforeſaid effect;" and which was unknown before his arrival.

It had been foreſeen by both courts, that the vulture's eye of mercantile rapaciouſneſs, which reſides in all commercial ſtates, would quickly diſcern the diſadvantages that might be derived from the above article, of the treaty, to the merchants of Holland, France, and of all the maritime powers: and with that view, that ſhips fitted out in theſe countries, and navigated by Engliſh ſeamen, would undoubtedly be ſent to the bay of Honduras, to poſſeſs themſelves of thoſe advantageous ſtipulations, which were intended for Great Britain only.

It is, alas! too evident, that the late war, ſo ruinous to this realm, in the profuſion of uſeleſs millions of money, and in the ſacrifice of thouſands of brave and uſeful ſubjects, had deſtined ſuch numbers to the ſea ſervice more than peace can employ, and by that means forced them to ſeek their bread in alien lands, that ſailors for the above purpoſe could not be wanting.

Hence it appears how abſolutely neceſſary it was, that either the above-mentioned ſchedule or licence ſhould be found in the hands of thoſe who were cutting logwood, as the beſt preſervative both of the Engliſh and Spaniſh rights, from the invaſion of others by fallacious means, and a mutual benefit to both nations.

That the want of theſe authorities is the chief reaſon for the ſuſpenſion of the logwood cutting is evident from the words of Don Philip Remires, that in conſideration of the want of inſtruments for your introduction, &c. "And I expect you will preſent me with the royal ſchedule that the King my maſter diſpatched to this end, or with orders from the King of Great Britain for this effect; and there is no doubt but I ſhall then attend to it with the care and equity I am commanded, iſſuing for that purpoſe the neceſſary orders to all the commandants, cabos, military and juſticiary, of all the diſtricts of their juriſdiction, &c."

By the 17th article of the treaty the Engliſh are entitled to the cutting of logwood only; but it is evident, from the words of Remires, uncontradicted by the petitioners to Governor Lyttleton, "that they had extended themſelves, gathering fruits as in their own country, and without waiting to ſettle the limits with the neceſſary ſolemnity that ſhould have ſecured their eſtabliſhment." Theſe circumſtances, had they been committed by Spaniards againſt Engliſhmen, would have been deemed the firſt violation of the peace.

Now, I would gladly know, whether the miniſters who ſtipulated the condition of logwood-cutting, by the authority of poſſeſſing either ſchedule or licence, and thereby precluding foreign merchants from enjoying commercial rights, through means of Engliſh ſubjects in their ſervice, have not proved themſelves deſerving the charge which his majeſty has committed to their conduct and the confidence of the public? Whether Don Remires has not acted as a faithful ſervant to his maſter, and a juſt ally to this crown by ſuſpending the logwood-cutters, till they are entitled to it by the ſtipulated authorities? Would not the indiſcriminate permiſſion of all, who call themſelves Engliſhmen, to this beneficial right, in a great meaſure annihilate the advantages which are fixed by treaty to the ſubjects and

merchants

merchants of this iſland? Muſt not this ſuſpenſion be ultimately attended with immenſe benefit to this nation, and ought it not on that account to be applauded at preſent by all who deſire the happineſs of England.

Is the neceſſary poſſeſſion of the abovementioned authorities for the cutting logwood, a circumſtance for reviling the miniſters who eſtabliſhed that, and concluded the peace; when by theſe authorities that right of cutting is ſecured to the ſubjects of this nation, and the evaſive means of acquiring it by Engliſhmen, who are not Engliſh ſubjects, precluded?

DAMPIER, who entered among the logwood-cutters in the year 1676, gives the following account of theſe lawleſs ſettlers: "The logwood trade was grown very common before I came hither, here being about 270 men living in all the Lagione and at Beef Iſland: This trade had its riſe from the decay of privateering: for after Jamaica was well ſettled by the Engliſh, and a peace eſtabliſhed with Spain, the privateers who had hitherto lived upon plundering the Spaniards, were put to their ſhifts; for they had prodigally ſpent whatever they got, and now wanting ſubſiſtance, were forced to go either to Petit-Guavas, where the privateer trade ſtill continued, or into the bay for logwood.——The more induſtrious ſort of them came hither; yet even theſe, though they could work well enough if they pleaſed, thought it a dry buſineſs to toil at cutting wood. They were good marks men, and took more delight in hunting; but neither of thoſe employments affected them ſo much as privateering: therefore they often made ſallies out in ſmall parties among the neareſt Indian towns, where they plundered and brought away the Indian women to ſerve them at their Huts, and ſent their huſbands to be ſold at Jamaica. Beſides, they had not forgot their old drinking-bouts, and would ſtill ſpend 30 or 40 *l.* at a ſitting aboard the ſhips that came hither from Jamaica, carouſing and firing of guns three or four days together. And though afterwards many ſober men came into the bay to cut wood, yet by degrees the old ſtandards ſo debauched them that they could never ſettle themſelves under any civil government, but continued in their wickedneſs, till the Spaniards, encouraged by their careleſs rioting, fell upon them, and took moſt of them ſingly at their own huts, and carried them away priſoners to Campeachy or La Vera Cruz; from whence they were ſent to Mexico, and ſold to ſeveral tradeſmen in that city; and from thence, after two or three years, when they could ſpeak Spaniſh, many of them made their eſcapes, and marched in by-paths back to La Vera Cruz, and by the flota conveyed to Spain, and ſo to England. I have ſpoke to many of them ſince, who told me that none of them were ſent to the ſilver mines to work, but kept in or near the city, and never ſuffered to go with their caravans to New Mexico, or that way. I relate this, becauſe it is generally ſuggeſted that the Spaniards commonly ſend their priſoners thither, and uſe them very barbarouſly; but I could never learn that any European had been thus ſerved; whether for fear of diſcovering their weakneſs, or any other reaſon, I know not. But to proceed. It is certain the logwood cutters, that were in the bay when I was there, were all routed or taken; a thing I ever feared, and that was the reaſon that moved me at laſt to come away, though from a place where a man might have got an eſtate."

To the Editor of the GENERAL MAGAZINE *of Arts and Sciences.*

SIR,

AS the Newtonian ſyſtem is now on all ſides vigorouſly attacked, I ſincerely wiſh the learned advocates for it would examine the matter ſtrictly, and make uſe of candid and reaſonable arguments, that the able and impartial readers may the better judge; and if you pleaſe to inſert this letter you will very much oblige, Sir,

Your moſt humble ſervant,

Honiton, Aug. 20, 1764. S. BAMFIELD.

Some Obſervations on that Philoſophy which reſpects the planets motions.

THIS I preſume amounts to ſo very little, that the whole, which can ſatisfactorily be known, may be ſummed up in what follows, notwithſtanding the truly-learned Sir Iſaac Newton ſpent his whole life almoſt in ſearch of it; for he acknowledges that his grand *Principia* was wholly deſigned to explain and account for the motions of the heavenly bodies: but how we can juſtly compare bodies on or near this

earth with thoſe which are beyond its attraction I know not; and I have clearly ſhewn in my preface, that there is no certain rule for the quantity or proportion of attraction, even in bodies here on earth: And had our philoſopher well and modeſtly conſidered this, methinks he ſhould not have launched out in unknown and inſcrutable debths, and have ſtruggled ſo to explain ſuch powers and motions as he never could comprehend. The utmoſt certainty we can arrive to, is, that all bodies here projected hitherto, return to this earth again, and we know nearly the law of deſcent. But what can be gathered from ſuch a minute phænomenon? That the moon circumvolves our earth, no body will deny, but why it ſhould run her courſe in ſuch preciſe time and at ſuch a diſtance as it does, no philoſophy yet can demonſtrate.

As to a centripetal force, our imaginary baſis, I affirm nothing can be more weak than to imagine it ſhould give any kind of ſolution or explanation to the motions of our planets; for Sir Iſaac's propoſition is unmathematical and conſequently fallacious. (Vide Lib. 1. Sec 2. Pr. 1. &c.) which I thus ſhew.

Let us ſuppoſe with Sir Iſaac that a body is projected along the limited line A c (Fig. 5.) half ways unto B; now the line C c drawn parallel to S B, might either be ſhorter or longer than there drawn, and yet this extraordinary curve, for ſo I call it, ſhall retain its true property, it ſeems; whence it will follow that the point C, might be either nearer to, or further from S, than it is, notwithſtanding A B is limited both in length and ſituation, which is quite ungeometrical; nor will trigonometry or algebra give any aſſiſtance. We can conſtruct by abſciſſa and ordinate, a circle elipſis, parabola, &c. &c. which are regulated by invariable equations; but this curve has not any (that I know.)

But further, had Sir Iſaac conſtructed this curve around, he muſt have found it to be of the ſpiral kind, though neither the Archimedean nor Logarithmic, and of conſequence ſuch a curve as would never return into itſelf; therefore impoſſible to be the path of a planet, Q E D.

Again, our philoſophers ſeem to err at firſt ſetting out, by imagining that all bodies muſt be projected in a tangent to that curve they travel in, and that the projectile force muſt be equal to the central, &c. But I ſhould be glad to know one reaſon at leaſt, why a body that is to revolve in a circle ſhould be thrown in a right line: is it not ten thouſand times more natural to ſuppoſe it to be delivered curvilinearly? a bowl thrown by the hand, may either go on in a ſtraight line, turning about its axis as the primary planets do, or may form a curve, according to the deliverance *. But why ſhould we talk of any ſuch projection at all? Muſt we ſuppoſe the almighty to have created our ſun firſt, and then planet by planet, in order as they ſtand? or otherwiſe, any primary, as our earth, ſome conſiderable time before the moon, and then to give the latter a projectile motion in a tangent to that orbit ſhe now deſcribes? and if we ſay not thus, what can we? If we take omnipotence out of the creator's hands, and apply a kind of mechaniſm to this matter, I am very poſitive it would be infinitely more natural to imagine that the moon is made to revolve about our earth, in like manner as a ſtone confined by a ſtring is, when whirled round by the Hand (or central force) and that this power alone is not only moſt natural for this purpoſe, but fully ſufficient to account for all the phænomena of the moon, and exhibits the true and only reaſon why the ſame face of her, is always preſented towards us. She revolves about no kind of axis whatſoever; for the very ſame ſpots of land, &c. that are higheſt or moſt northerly when ſhe has the greateſt altitude, whether at new moon or full moon, are invariably ſo at all times, and I affirm that no other motion than the above, can exhibit ſuch phænomena, although I have in my aſtronomy, too credulouſly admitted of a revolution about its axis, finding it to be the univerſal opinion of aſtronomers.

When a ſtone, annexed to a ſtring, is whirled round by the Hand, we can give it a very ſwift or a very ſlow motion, and yet the ſtring ſhall retain a due tenſion: and doubtedly the omnipotent has ſo much power over the bodies he hath created, that he can drive them in what manner and at what pace he pleaſes: and yet proud man would limit his power; for he aſſerts that there

* Note, *I do not mean the primary planets orbits are right lines; but I ſay that a body which revolves about its axis, and travels a circle, muſt be delivered in a right-lined direction coincident with the plane of a circle; there is no neceſſity for, if a poſſibility of, its being delivered in a tangent to the convexity of a circle. If our earth was a perfect globe, and a bowl was thrown with a velocity to carry it quite round, the ball would continue to revolve ſo long as the central power of attraction ſhould exert its force; it would have no niſus to fly off (I imagine) let its velocity be ever ſo great; notwithſtanding our philoſophy urges it ſo ſtrongly.*

there is one univerſal Rule which ſpreads itſelf throughout the univerſe! viz. That the ſquares of the periodical times of the planets, &c. are as the Cubes of the diſtances! But if philoſophers ſhould but acknowledge that GOD is not obliged to work by that rule they have found for him, and they cannot deny it, what becomes of all their boaſted philoſophy? The attempt of finding the cauſe of GOD's wonderful works, I look on as the moſt audacious flow of an unhappy compoſition of pride and ignorance: 'tis enough for man to know that things are thus and thus.

The comparing of the orbits of the heavenly bodies with a ball ſuſpended by a ſtring (as our moderns do) is not in anywiſe to the purpoſe; becauſe the path which the ball deſcribes is proportionally at a great diſtance ſideways from the central power, and is parallel to it; whereas the central power of a planet, is the centre of the orbit itſelf, and a line drawn from one extremity of it to the other, will paſs through the central force, which is impoſſible in the caſe above. No ſingle planet travelling about one fixed ſun, can deſcribe any other orbit than a perfect circle; (abſtract from other planets attraction) but was it to revolve about two ſuns, the curve would moſt naturally be an ellipſes, but not otherwiſe.

A candid and rational anſwer or remark is deſired to this, or to any other part of my aſtronomy, and will be pleaſing to,

Sirs,

Your moſt obedient humble ſervant,

S. BAMFIELD.

P. S. Perhaps ſome readers will ſay that I do not talk philoſophically, becauſe I uſe not the terms, *momentum, phyſical action, vis inertia, vis inſita, reaction, gravity, primary elements of matter*, &c. &c. but I muſt obſerve, that it is much more elligible to ſpeak of things which we have a juſt idea of, and write of them ſo as to be underſtood; than to conceal the plain meaning by ambiguous and abſtruſe expreſſions.

The CASSAVA.

THIS root is called *Caſſava*; of which the Indians and Europeans in America make their bread. After having grated this root, they preſs out all the moiſture, which is venomous. They then put the root ſo preſſed upon an iron plate, ſuch as the hatters make uſe of, and keep a moderate fire under it, to expel all the moiſture that remains; and by this means a lump of bread is made out of it, which is as good as the beſt biſcuit. If a man or beaſt were to drink the water that comes from it, they would die in the utmoſt torments: but this water when boiled makes a very good drink.

This large black caterpillar, whoſe head and hinder part are of a blood colour, and its whole body ſtreaked with black and yellow, did a great deal of damage while I was at Surinam, in the lands where this plant grew: they laid waſte whole fields that were deſigned for the ſubſiſtance of the inhabitants. In the month of December, 1700, having changed its ſkin, it was transformed into a brown *nympha*, which four weeks after produced a beautiful *nocturnal* butterfly, beautifully ſpeckled with black and white, with orange-coloured ſpots upon its body.

For the greater ornament of the plate, I have added a ſerpent, naturally twiſted in this manner, and well ſpotted. Its belly, which is a little ſwelled, ſhews that it carries its eggs, that are juſt like thoſe repreſented on the Caſſava root. They are covered with a ſkin ſpeckled with blue, and are oblong. *From Maria Sibylla Merian's deſcription of the inſects of Surinam.*

ESSAYS *on* HUSBANDRY. *In one volume, 8vo.*

THE author of theſe Eſſays has ſhewn himſelf a thorough maſter of the ſubjects he treats of. He has collected and thrown together, in a judicious manner, the ſubſtance of other writers, ancient and modern, and illuſtrated their remarks with obſervations drawn from his own experience. The firſt eſſay is deſigned to ſhew—that agriculture is the baſis and ſupport of all flouriſhing communities—to deſcribe the ancient and preſent ſtate of this uſeful art—to prove the benefits of a juſt harmonization between agriculture, manufactures, trade, and commerce—and to ſet forth the defects, omiſſions, and poſſible improvements in Engliſh huſbandry.

The author, after giving his reaſons from writing upon agriculture, (the chief of which is a love for his country) obſerves, that England juſtly claims the pre-eminence in this art, and that directions of national huſbandry ought to be appointed. The Lands of England, he maintains, may be improved one-ſixth part more. Agriculture, he affirms, is the main ſupport of commerce, trade, manufactures, &c. and

ſhews the national advantages reſulting from a right attention to it: he gives us the preſent ſtate of huſbandry in the ſeveral parts of Europe; tells us in what reſpects it is ſtill improveable here in England; and recommends trials to be made in cultivating ſeveral foreign articles, hitherto overlooked by us. He expatiates largely on the great improvements which might be made in our new acquiſitions of Canada, Florida, &c. particularly in the culture of native and foreign vines. He enquires how far our colonies have advanced the external ſtrength of England, and how far the Eaſt India trade is prejudicial to it. With reſpect to this trade, he ſays he is aſſured, that as much ſuperfluous money is ſpent in England in tea, &c. as would maintain four millions of ſubjects in bread only. He enquires how far mines (in foreign countries) are profitable to their mother country; and takes occaſion to introduce a curious fable on this ſubject, which we tranſcribe for the entertainment of our readrs.

"In the age of the american adventures, about the year 1550, when all Europe propoſed to grow rich in a moment, a Spaniſh gentleman, one Don Gregorio de Brice, being acquainted with ſome of Orellana's companions, lately returned from the river of the Amazons, procured intelligence of a ſmall iſland, called by the natives rhadamilla. This little ſpot of land was repreſented to be the true Heſperides of the antients; for it abounded with woods, rivulets, paſturage, and gold-mines. Nay, the very ſtones were reported to have a mixture of gold in them.

"Animated with this relation, Don Gregorio turned his whole eſtate into money, and fitted out a ſhip, perſuading his younger brother, Don Eſtavan, to join with him in the adventure. The latter was a man of a cool head, and totally devoid of ambition and avarice, but complied from mere affection to his brother, whom he loved paſſionately, having no other relation.

"In the voyage Don Gregorio touched upon the coaſt of Barbary, and purchaſed ſlaves to work in his mines: Eveſtan bought only a couple of ſcore of ſheep and a dozen of goats, with two males of each kind. Being aſked the reaſon, his anſwer was, 'you, my brother, are a ſecond Cain, a man of a bold enterprizing genius: I will imitate the humble Abel, and turn paſtor: for meat and cloathing muſt be thought of, as well as the acquiſition of precious metal. It ſhall be my buſineſs to act the part of proveditor-general for you ing, amongſt other things, that their ſhip and your labourers, who may poſſibly find gold to be neither eatable nor drinkable. I will therefore ſupply the company with food, and you ſhall pay me for it out of your vaſt treaſures.'

"Upon this Don Gregorio laughed; but a ſlight air of contempt was intermixed with his laughter. 'Ah, brother, ſaid he, you have no ſpirit, no elevation of ſentiment; that mind of yours runs too much upon vulgar matters. The man that has a mine of gold commands every thing that this ſublunary world can afford.—No, no,—replied an old mariner from the Bay of Biſcay, ſhaking his head; there is a dath of good ſenſe in Don Eſtevan's propoſal.—It is ſometimes neceſſary to eat, as well as grow rich.

"At length the ſhip reached the deſired iſland. A gold mine was found according to expectation, and the produce thereof made it worthy to be called a Potoſi in miniature. Meanwhile Don Gregorio gave himſelf little concern about bodily ſuſtenance, living in a great meaſure by imagination, and feeding upon the hopes of future abundance: but his aſſociates had not ſublimity of fancy enough to reliſh ſuch fictitious aliment; for, after having worked all day, they were juſt able to ſupport life with a few ſmall fiſhes hard to be taken, and ſome ordinary fruits and vegetables, ſuch as could be found in the neighbouring woods and vallies. During this interim, the ſhrewd ſenſible Biſcayner, already mentioned, miſſed little of occaſioning a mutiny without intending it: for, having found no ſupper in the fields, not even a ſalad of trefoil-leaves and thiſtle-roots, he ſet his foot on a lump of gold which lay in the hut, and broke out in the following exclamation: 'Fatal deceiver of mankind! ſaid he, what art thou in thyſelf?——Gladly would I exchange twenty ſuch lumps of metal for as many pounds of the worſt mutton fed upon Eſtremadura Turnips!' The reſt of the crew, conceived the ſame indignation that the Biſcayner did; but Don Eſtevan compoſed the diſorder by aſſuring them, that tomorrow he intended to kill a lamb and a kid three parts grown, in order to give a bountiful repaſt to the whole ſociety.

"This he continued thrice a week; and from that time matters went on very comfortably: for Don Eſtevan fed the men well, and cloathed them with the wool of his ſheep and ſkins of his goats. His brother gave an equivalent in gold for all that was purchaſed; and that with a certain juſtneſs and nobleneſs of ſoul, quite peculiar to an old Caſtilian.

"After three years thus ſpent, the men petitioned to return to Old Spain, alledg-

ing,

ing, among other things, that their ſhip (though a new one, when they ſet out) would never be able to ſail home, in caſe they ſtayed another winter. Their wealth, though of great value, was eaſily ſtowed, and a proſperous navigation ſoon carried them to the Canaries. As the weather ſtill continued fine, Don Eſtevan propoſed to his brother to ſettle their accounts; but, when the whole debt due to the former was fully peruſed, Don Gregorio changed colour, and, letting the papers fall, 'O Eſtevan, cried he, I am a bankrupt——I am undone!——But my brother has gotten what I have loſt, and that is ſufficient!'

"You are only *miſtaken*, my dear brother,' ſaid Eſtevan coolly, but not *undone*. You wanted to acquire that wealth inſtantaneouſly, which providence decrees to man under the condition of earning it by little and little, with long perſeverance and moderate deſires!——To gain riches in a moment is not induſtry, but gaming.—— You acknowledge the error, and it is my buſineſs to repair your loſs. One-third therefore of our acquiſitions is for ever yours; a ſecond part ſhall be reſerved for myſelf; and the reſidue diſtributed to the ſhip's company. It is likewiſe but a proper acknowledgement to the bounty of providence, that the ſlaves ſhould have their liberty, and end their days in quiet with you and me, as they were always our fellow-creatures, and at preſent our fellow-chriſtains.'

"The moral of this novel, or fable, ſpeaks itſelf."

After this, the author proceeds to ſhew, that bringing much money into a kingdom does not neceſſarily indeed, but uſually, introduce luxury and dearneſs of proviſions; and this he proves by various inſtances, which lead him to obſerve, that Spain was not merely hurt by the acquiſition and importing of American gold, but by neglecting agriculture and the other arts of gaining ſubſiſtence at home. He concludes with an exhortation to country gentlemen to underſtand huſbandry in their own perſons.

His ſecond eſſay gives an account of ſome experiments tending to improve the culture of lucerne by tranplantation, being the firſt of the kind hitherto made and publiſhed in England; and from which it appears, that lucerne is an article of great importance in Engliſh Huſbandry. This eſſay (as our author himſelf declares) "is intended to be merely of a practical nature, or deduced from matters of experience in himſelf or others, without any hypotheſis, or even conjectures, without chymical obſervations or mathematical reaſonings; from a perſuaſion, that huſbandry receives few aſſiſtances, except from natural ſagacity and matters of fact." The rules here laid down for the ſowing, tranſplanting, cutting, drilling, &c. of lucerne muſt afford ſatisfaction to every one who has turned his thought towards huſbandry; but as the generality of our readers muſt be ſuppoſed to be little converſant in theſe matters, we forbear making any extracts. We ſhall only add, that the author throughout his work with great propriety recommends Induſtry; in confirmation of the benefit of which he introduces the following ſhort ſtory from Pliny the Elder.

"One Creſimus (ſays he) being made a freed-man, purchaſed a little farm, where, by dint of ſkill and unwearied application, he raiſed ſuch ſurpiſing crops that the neighbouring huſbandmen all accuſed him of magic; alledging, in particular, that he enriched his own fields, and impoveriſhed theirs. A day of trial was appointed before the Ædile of the diſtrict. Creſimus, after various allegations produced againſt him, found means to bring his ſpades, Scythes, and reap-hooks into the court, where, upon examination, they appeared to be very bright and exceedingly clean. His ploughs and harrows were next exhibited; they were ponderous, ſtrong, and admirably made. His cattle then paſſed along the ſtreet in review; they were in full proof, large, and well fed. 'Behold, O Romans, (cried he) theſe are my magical arts in agriculture, but ſome there are, which it is not in my power to produce; I cannot make you ſee the ſweat of my brows, when I toiled and laboured; nor have I kept a minute diary of my unwearied induſtry, and perpetual fatigue, late and early.'

"Upon this, every ſenſible by-ſtander ſoon perceived the moral of the ſtory; and Creſimus returned home, laden with the old Roman honour, BONUS CIVIS, BONUS AGRICOLA."

MATHEMATICAL CORRESPONDENCE.

WE *have received a very warm letter from our ingenious friend Mr. Waugh, in which he tells us, that* "he has ſometimes thought" *that we have acted partially by inſerting* "perſons names in the catalogues to ſolutions, wherein, HE BELIEVES, their ſkill is "unex-

"unexperienced." *And, it seems,* "he has experienced this in several solutions, but in a "*particular* manner in the solution given to the 16th quest. which he is ready to prove "false when Mr. Todd pleases." *Now as we are well convinced of the truth of Mr.* Todd's *process, and are satisfied that he will have no objection to this gentleman's displaying his abilities, we will venture to invite Mr.* Waugh *to try what he can do in that respect; and hereby promise him, that when his proof arrives it shall be printed* verbatim, *without the least alteration either in point of* grammar *or* orthography: *But we beg leave to remind him, that we think he is driven to his* ne plus ultra *when (instead of sending a solution to that question) he only tells us, that* "he has a solution, which he kept back on purpose."

Now in order to shew our impartiality, we shall lay before our readers Mr. Brown's *letter to us, and also that question of his which Mr.* Waugh *charged us with altering so much that it had not the least affinity to that which was printed.* vid. p. 190, and 236.

To the AUTHOR *of the* GENERAL MAGAZINE.

SIR,

MR. T. TODD being mistaken in his answer (to the 16th quest.) at p. 341, of your last Magazine; you may possibly oblige some of your mathematical readers by inserting the following true answer (to that curious question) in your next Magazine,

Your most humble Servant to command,

GEORGE BROWN,
Teacher of the Mathematics in the Tree-Rope-Walk, Portsmouth Common.

LET ABC represent the given equilateral triangle, D the point *bisecting* the base AC, and ENPM the required ellipsis. —— Put BD $= a$, DA $=$ DC $= ab$, $p =$ a certain given line, (or rather a certain right line to be determined;) BH $= x$, HF $= y$. Then as $a : ab :: x :$ HI $=$ HG $= bx$, then will IF $= bx + y$, FG $= bx - y$, (fig. 1.) and per quest. $\overline{IF}^2 + \overline{FG}^2 =$ pDF, i. e. $2b^2x^2 + 2y^2 = p\sqrt{y^2 + \overline{a-x}^2}$ $\therefore y^2 = \frac{p^2}{8} - b^2x^2 \pm \frac{p}{8}\sqrt{p^2 - 16b^2x^2 + 16 \times \overline{a-x}^2}$, but the root must extract, because the curve is an ellipsis, per quest. $\therefore p^2 = \frac{16a^2b^2}{1-b^2}$, then $y^2 = \frac{2a^2b^2 \mp 2a^2b}{1-b^2} - b^2x^2 \pm 2abx$, which equation shews, that there will be two *ellipses*, either of which will answer the quest. Now, let the upper sign take place, then $y^2 = 2abx - b^2x^2 - \frac{2a^2b}{1+b}$ (fig. 1.) and when F *coincides* with E and P, $y = 0$, and $x = \frac{a}{b} \pm \frac{a}{b}\sqrt{\frac{1-b}{1+b}} = \begin{Bmatrix} \text{BP} \\ \text{BE} \end{Bmatrix}$, then will the transverse EP $= \frac{2a}{b}\sqrt{\frac{1-b}{1+b}}$; now in the above equation make y a maximum; $\therefore x = \frac{a}{b}$, and the conjugate NM $= 2y = 2a\sqrt{\frac{1-b}{1+b}}$. ——

Fig. 1.

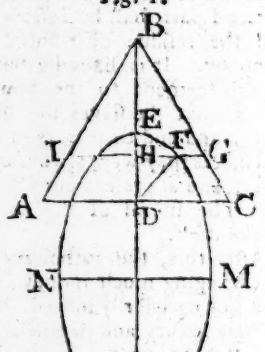
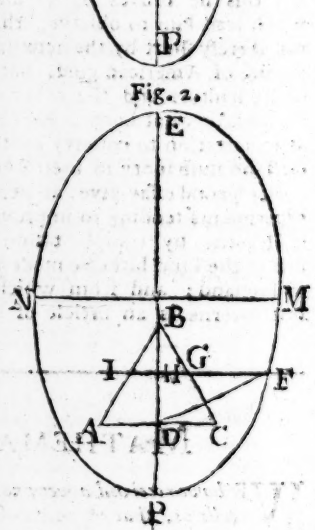


Fig. 2.



Lastly, let the under sign take place, then $y^2 = \frac{2a^2b}{1-b} - b^2x^2 - 2abx$ (fig. 2.) and when F *coincides* with E and P, $y = 0$, and $x = \frac{a}{b} \pm \frac{a}{b}\sqrt{\frac{1+b}{1-b}} = \begin{Bmatrix} \text{BE} \\ \text{BP} \end{Bmatrix}$, then will

will the tranſverſe $EP = \frac{2a}{b}\sqrt{\frac{1+b}{1-b}}$, and the conjugate $NM = 2y = 2a\sqrt{\frac{1+b}{1-b}}$, the required dimenſions of the ellipſis ENPM, in this caſe. Q. E. I.

Cor. From the above ſol. it may be eaſily proved, that the point D is the focus of the required ellipſis. —— And b muſt be leſs than unity or the queſt. is impoſſible.

Queſtion 18. *By Mr.* George Brown, *Teacher of the Mathematics, in the Tree-Rope-Walk, Portſmouth-Common.*

REquired the dimenſions and area of the greateſt ellipſis, that can be inſcribed in a curve, abſciſſa $= 44$, and Semi-ordinate $= 56$, of a common parabola?

*** *As the above queſtion is printed verbatim from Mr. Brown's own writing, our readers will judge, by comparing it with that on p.* 190, *whether that gentleman had any reaſon to be offended with the liberty which we took in making a ſlight alteration.*

MATHEMATICAL QUESTIONS, *anſwered.*

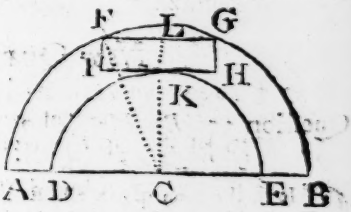
Queſt. 27. *Anſwered by Mr.* Iſaac Dalby.

IF $x =$ the number of trees on one ſide, and $y =$ the number on the other; then will $\overline{x-1} \times 50$ be one ſide of the Rectangle; and $\overline{y-1} \times 40$ will be the other; now we are only to find x and y, when $50x - 50$ is as near $= 40y - 40$ as poſſible, when $xy = 2000$; whence $x = 40$, and $y = 50$; and the ſides of the rectangle $= 1950$, and 1960 feet. W. W. R.

This Queſtion was likewiſe ſolved by Mr. Edward Smith, *and Mr.* Thomas Wilſon, *who bring out the ſame numbers; Mr.* Sewell, *the propoſer, makes the length* 2450 *feet and the breadth* 1560.

Queſt. 28, *anſwered By Mr.* G. Cetii, *of Greenwich.*

IN the annexed figure, let $x = FL$, and $y = FI = KL$, &c. alſo put $a = 40 = FC$, and $b = 30 = KC$: Then, per Euclid 47. 1. $x = \sqrt{aa - bb - 2by - yy}$; and $\sqrt{aa - bb - 2by - yy} \times y =$ the area, a maximum, per queſtion, which put into fluxions, and reduced, gives $y = 6{,}76$, whence $x = 15{,}77$.



This queſtion was alſo anſwered by Meſſrs. Waugh, Taylor, Thompſon, Bernardin, Todd, Barber, Rotherham, Fleck, Hague, Walker, Hyde *the propoſer,* Dalby, Barker *and* Smith.

Queſt. 29, *anſwered by Mr.* David Waugh, *of Portſmouth.*

PUT $c = 3.1416$, $a =$ height of the given ſolid to be circumſcribed by the leaſt cone poſſible. Then, per queſtion, $c \times \overline{a-x} \times \overline{a + x^m}^{\frac{2x^n}{v}} =$ ſolidity of the greateſt inſcribed cylinder, which muſt be a Maximum, or $a - x \times \overline{a + x^m}^{\frac{2xn}{v}}$ a maximum, put into

into fluxions and reduced $\frac{\overline{a-x}\times 2nx^{n-1}}{v}$ H. L. $a+x^m+\frac{\overline{a-x}\times 2mx^{m+n-1}}{v\times\overline{a+x^m}}$ $=1$, from which equation the value of x may be found, and then the dimenſions of the leaſt circumſcribing cone will become known.

Mr. J. Barber *the propoſer, and Mr.* T. Barker, *alſo ſolved this queſtion.*

Queſtion 30, *anſwered by Mr.* T. Moſs, *the propoſer.*

IT is evident, from the nature of the queſtion, that px and $\frac{2pl}{3}$ are in a conſtant ratio, *i. e.* as $x:\frac{2l}{3}$; it therefore only remains to prove that $b^2+\overline{b^2-b^2}\times n$ (or $b\times b+\overline{b+b}\times\overline{b-b}\times n$) is to $2b\times b+b\times b$ in a conſtant ratio (n being any conſtant quantity:) Now it is plain that every different Factor, (viz. b, $b+b$, $b-b$ and b,) contained in the terms of the ratio, will be equally affected by any multiple, or part, of b (and b) being taken; therefore the four quantities, or rectangles ($b\times b$, $\overline{b+b}\times\overline{b-b}\times n$, $2b\times b$ and $b\times b$) viz. two in each term of the propoſed ratio, will thereby be each of them augmented, or diminiſhed, alike; conſequently $b\times b+\overline{b+b}\times\overline{b-b}\times n$ is to $2b\times b+b\times b$ in a conſtant proportion; this being multiplied by two other quantities, which are alſo in a conſtant proportion, (i. e. px and $\frac{2pl}{3}$) the product muſt, evidently, be in a conſtant proportion; that is, $px\times b^2+\overline{b+b}\times\overline{b-b}\times n:\frac{2pl}{3}\times 2\overline{b^2+b^2}$ in a conſtant ratio, let b and b be what they will (in a conſtant ratio), and alſo l and x in any conſtant proportion: Or, in other words, if $\frac{b}{b}$ and $\frac{x}{b}$ are any conſtant quantities. Q. E. I.

Mr. Waugh, *alſo ſent a ſolution to this queſtion.*

New QUESTIONS *to be anſwered.*

Queſtion 35. *By Mr.* Tho. Barker *of Wiſſet, in Suffolk.*

GIven the area of an ellipſis $=A$, and the length of a line drawn from the centre, terminating in the periphery (which is perpendicular to the ſide of its leaſt circumſcribing triangle) $=P$: Quere, the ellipſis?

Queſt. 36. *By Mr.* John Barber, *of Saxmundham in Suffolk.*

GIven $20x^4\ddot{x}+y\ddot{x}+6\ddot{y}=0$; to find y in terms of x, ſuppoſing that when $x=0$, $y=8$.

Queſtion 37. *By Mr.* David Waugh, *of Portſmouth.*

GIven $x+y=3=a$, and $x^9+y^9=31=b$. Required to find x and y by an equation not exceeding a quadratic?

Queſtion 38. *By Mr.* T. Todd *of Weſt-Smithfield.*

IN the fluxionary equation $\dot{y}^3+\dot{x}^2\dot{y}+y\dot{y}\ddot{y}+y\dot{x}\ddot{x}=\overline{\dot{y}^2+\dot{x}^2}^{\frac{1}{2}}\times\overline{2\dot{x}\dot{y}+x\ddot{y}+y\ddot{x}}$, to determine the relation of the fluents x and y; ſuppoſing, that when $x=m$, y will $=n$.

Apparent

Apparent Times of the Eclipſes of Jupiter's *Satellites, which will happen in* Sept. 1764, *computed, from New Tables, to the Meridian of the* ROYAL OBSERVATORY *at* GREENWICH.

I. Satellite. Emerſions.				II. Satellite. Emerſions.				III. Satellite.					IV. Satellite.			
D	H.	M.	S	D	H.	M.	S.	D	H.	M	S.		D	H.	M.	S.
2	14	* 12	24	3	14	* 38	28	3	21	53	34	I	6	11	29	0 I
4	8	41	22	7	3	56	22	4	0	41	24	E		14	* 17	52 E
5	3	10	36	10	17	14	16	11	1	53	24	I	23	5	35	10
7	21	39	37	14	6	32	17		4	43	31	E				
9	16	* 8	24	17	19	50	16	18	5	54	23	I	None but thoſe marked * are viſible at *Greenwich*.			
11	10	37	38	21	9	8	18		8	45	22	E				
13	5	6	50	24	22	26	14	25	9	56	31	I				
14	23	35	55	28	11	* 44	18		12	* 47	7	E				
16	18	5	0													
18	12	* 34	2													
20	7	3	7													
22	1	32	11													
23	20	1	12													
25	14	* 30	15													
27	8	58	14													
29	3	28	18													
30	21	57	48													

Other Celeſtial Phænomena this Month.

The three or four firſt days of this month *Jupiter* may in the morning before ſun-riſing be compared with ♌ in *Gemini*, by the help of a good clock and micrometer: *Jupiter* will be a ſmall matter north of the ſtars parallel, and precede it about a minute in time . . . On the 15th between 9h and 12h at night, the moon will be among the *Pleiades*, and will eclipſe ſeveral of them.

ERRATA *in the laſt Magazine.*

In the figure to the ſolution of queſt. 16, the line *g* I was omitted.

In the ſolution to queſt. 24, there is a tranſpoſition of names, whereby the ſolution which is Mr. *David Waugh*'s is aſcribed, by miſtake, to Mr. *E. Smith*.

In queſtion 33, after *maximum*, add, *and curve ſurface* = *b*.

POETRY.

On the Chevalier Taylor.

SUPERB! — tranſcending! — inexhauſted theme!
What wonders hidden in a *modeſt* name.
Taylor! to *thee* the greateſt monarchs owe
What heav'n alone, or Taylor could beſtow,
That living *flambeau*, *Globe* of genial fires,
Which ſmiles — ſpeaks — languiſhes; — ſparkles, charms, inſpires.
Petrowna's eyes had ne'er a lover won,
Nor famed †Macguire ſeen the *bore* of gun
Without thine aid: all *wonderous*, yet *true!*
Thou'rt Philo — Muſic, Tragi — Comic too.
O then, to ſee *thee* ſhake the *lofty* dance!
Spring! turn — return! 'gain ſpring! piqueer, and prance!
Next, how *thou* tickleſt the ſoft female heart!
The Devil's in't, if *thou* do'ſt not *thy* part!

* Elizabeth Petrowna, *empreſs of all the Ruſſias.*

† *When our public papers rang with the praiſes of general* Macguire *on occaſion of the gallant defence he made at Dreſden, when the king of Pruſſia ſuddenly attacked that city in* 1760, *the chevalier opportunely publiſhed in the Munſter journal, that it was but ſeven years, ſince he had reſtored that general to his ſight by expreſs order of the empreſs queen of Hungary.*

While thus at home thy glorious feats we view,
Let's ſee abroad what *Chevaliers* can do,
Things yet more *wondrous!* Within ſight of France
Our Britiſh ‡*Taylors* teach *Monſieurs* to dance.
With *Needle* ſhaper, they purſue the fight,
Than chevalier employs to purge the ſi ht;
Sad needle-work, indeed, to Frenchman's B——m
With ‖*Apparat*' of fire and beat of drum!
Here's likeneſs, chevalier! nay, ſome odds too:
But Taylor's feats ſhould not allarm you,
For Taylors only Taylor could outdo.
Nay, I maintain, let folks ſay what they will,
Our chevalier is the firſt Taylor ſtill:
Pontifical—, imperial—, poliſh—, Pruſſian,
Britiſh—, Hanoverian—, Swediſh—, Ruſſian,
Ottoman—, Hungarian—, Swiſs—, Piedmonteze,
Mogollo—, Tartar, Perſian, and Chineze;
Why, *Elliot*'s Taylors are by *thee* outdone
As *ſhrimps*, or *lobſter* by the midday ſun.
Riſe, then, great heroe! *mount* the public *ſtage*;
Diſplay thy merits, and inſtruct the age.
Tell laſt poſterity all *thou'ſt* done and ſeen
From humble Jean to great *Muſcovia*'s queen,
The thouſands by thy pow'r reliev'd; the thouſand ſlain:
Slain, not by *thee*; by *thee* all were redreſt,
'Twas *fate*'s relentleſs *ſcythe* mow'd down the reſt.

Anſwer to the lady's library. Addreſſed to the ladies.

TO form your taſte for learning moſt polite,
To read with judgment and correctly write,
The following authors carefully peruſe,
(A library ſuch as ladies fair ſhould chuſe,)
Firſt famous *Dryden*, and renowned *Shakeſpear*, 1, 2
And *Pope*'s immortal works peruſe with care: 3
And then with fable decorate the ſcence
And 'mongſt his Lilliputians trace the *Dean*;† 4
Thus far, let *Cato*'s courage teach to dare, 5
All vice that would your tender minds enſnare;
With *Parnell*'s works and *Suckling*'s too converſe, 6, 7
They'll form your ſtyle, and make ſublime your verſe;
And read the volumes of ingenious *Rowe*, 8
They'll both amuſe and give inſtruction too,
Nor *Oldham*'s works nor *Payne*'s neglected lie 9, 10
The minds moſt pleas'd with dear variety.
When for miſcellany you are inclin'd,
And various ſubjects fill th' attentive mind;
Let *Newton* an admir'd author be 11
And the *Conniſſeurs* to curb vanity 12
Let *Payne* and *Locke*, be carefully perus'd, 13, 14
And *Church* wherein good learning is infus'd, 15
The *Tatlers* nor *Spectator* don't diſdain, 16, 17
For they to ladies ſtudies have a claim,
And *Rapin*'s works and famous *Pamela*, 18, 19
Do for amuſement often claim a day;
Nor *Carter* nor the *Guardians* don't forget 20, 21
For they inſtruct and good examples ſet.
When deep reflection leads to things divine,
And makes the Rays of goſpel truths to ſhine,
Let *Cave* and *Poole*, and *Sparks* attention claim, 22, 23, 24
Each doubtful ſentence fully to explain,
Nor *Towerſon*, *Gilpin*, or renouned *Black*, 25, 26, 27
Their proper helps as ſacred guides do lack,
And *Newcomb*'s works and *Purſelots* too explain 28, 29
The way which we may heav'nly joys obtain.

Anſwer to Mr. Thomas de Stonton's *Ænigma in your laſt. With a trifling one for his ſolution.*

MAY I, dear Sir, with any ſafety venture
In OWEN's Mag. the liſt of fame to enter;
Amongſt your Philo—Mathes, and ſo forth,
By Jove, I ſcarce dare venture, by my Troth;
For once, I'll ſtand a candidate for fame;
Under the ſanction of de Stonton's name;
Whoſe eaſy numbers could I imitate,
My joy would then be eminently great.
Dear Sir, would Mr. Owen but permit
A puny bard ſometimes to try his wit,
In giving to your riddles, Sir, an anſwer,
I now and then will ſend one,—if I can Sir.
His leave obtain'd, the affair is compromis'd,
The act is paſs'd, and I am naturaliz'd.
Perhaps I ſhould have took my friends § advice,
And not have ſent an anſwer to your DICE.
But whatſoever caution he may uſe,
I could not with civility refuſe,
The compliment from one friend to the other,
For one good turn, they ſay, deſerve another.
Then,

‡ Elliot's *light horſe, who behaved ſo gallantly in Germany.*
‖ Superb apparatus. *See the chevalier's cabinet of curioſities.*
* *Elegant compariſon, familiar to the chevalier.* † *Swift.*
§ *Mr. Sadler, to whom an Ænigma was addreſt, but he ſtrictly obſerv'd the old ſaying, a ſmall tongue make a long head.*

Then, conſequently, if this maxim's true,
You'll do to me, as I have done to you.
Say, what I am, which ſkim the glaſſy plain,
And trip around the lovely nymph and ſwain.
(If in the air you ſee me mounted high;)
I ſtand, though running, and when flying lie;
Search the deep vallies where the lilies grow;
Or, ſhady woodland where the hauthorn blow;
The gay deck'd meads, where ſports the
friſky lambs;
With pleaſing tranſports round their bleating
dams;
View the enamell'd field, the ſpangled ſky;
The various flowers with their various dye.
Among theſe beauties, I can make no doubt,
But your keen eye will quickly find me out.

Lincoln Aug. 15, 1764. JOHN CLARKE.

Anſwer to Mr. Walker's *Query in laſt Month's Magazine.*

SIR,

TO expreſs th' ſigns of bleeding hearts,
When you are call'd to diſtant parts,
Seems flattery to Polly:
Friend Walker may fill up his glaſs,
And toaſt a health to each briſk laſs,
'Twill drown his melancholy.

Stow, Aug. 6, 1764. *Miſs* Polly Stow.

A new Rebus. Addreſſed to Mr. Thomas Walker.

TAKE the half of a liquor preſented by Don——
And one ſixth of an inſtrument played upon;
But before I conclude, join what ends with a
ſmile,
You've the ſtile of a fair ſex—the pride of our
iſle;
If you make her out cleaver, pray do not
balk her,
She may make you happy—my good natur'd
Walker.

Aug. 6, 1764. *Miſs* Polly Stow.

A REBUS.

IF you add to a meaſure much uſed in trade
Two thirds of an anſwer receiv'd from a
maid,
When aſk'd for a kiſs, laſt Midſummer day,
By Roger, a ſwain, when were making of
hay;
Three fifths of what criminals often do crave,
With letter the fifth, when connected you'll
have
The name of a town much admir'd by many,
For pleaſantneſs ſeated, not exceeded by any.

A verſification of a Lawyer's *bill, actually delivered and payed, for making out a pedigree.*

A bill of charges juſtly due
From lawyer C *to Eſquire* U.

	l.	*s.*	*d.*
ATtending for inſtructions, when			
Your honour bid me call again.	0	6	8
The like attendance, time the ſecond,			
Which, as before, is fairly reckon'd.	0	6	8
Taking inſtructions given to me			
For drawing up your pedigree.	0	6	8
Peruſing ſaid inſtructions, to			
Conſider whether right or no.	0	6	8
You form'd the ſcaling to perfect on,			
I therefore only charge inſpection.	0	6	8
Drawing up pedigree compleat	2	2	0
Fair copy, cloſely wrote, one ſheet.	0	5	0
Attending to examine ſame,	0	6	8
Adding *Eſquire* to Ws——'s name.	0	3	4
Addendum too of D——'s birth.	0	6	8
Paid porters, coach-hire, and ſo forth.	0	10	6
Fair copy of this bill of coſt.	0	2	6
Another, for the firſt you loſt.	0	2	6
Advice, time, trouble, and my care			
In ſettling this perplext affair	1	1	0
Writing receipt at foot of bill	0	3	4
My clerk—but give him what you			
will.			
The letter of attorney you			
Diſcharg'd before, ſo nothing due	0	0	0
Receiv'd of Eſquire U aforeſaid	6	16	10

Contents in full: what can be more ſaid?

R—— C——

GOTHAM.

A POEM. Book III.

By C. CHURCHILL.

OF all the various productions of this author it is difficult to determine which is the moſt excellent; and upon the appearance of every new piece of his, we are apt to cry with Caſſio, "this is a more exquiſite ſong than t'other."

Our poet, being now ſeated on his imaginary throne of Gotham, reflects upon the duties belonging to his regal function.

In empire young, ſcarce warm on GOTHAM's throne,
The dangers, and the ſweets of pow'r, unknown,
Pleas'd, tho' I ſcarce know why, like ſome
young child,
Whoſe little ſenſes each new toy turns wild.
How do I hold ſweet dalliance with my crown,
And wanton with dominion, how lay down,

Without the ſanction of a precedent,
Rules of moſt large and abſolute extent;
Rules, which from ſenſe of public virtue ſpring,
And, all at once, commence a PATRIOT KING.....
But, (he aſks) ....
Have I well weigh'd the great, the noble part
I'm now to play? Have I explor'd my heart,
That labyrinth of fraud, that deep, dark cell,
Where, unſuſpected e'en by me, may dwell
Ten thouſand follies? Have I found out there
What I am fit to do, and what to bear? ....
A PATRIOT KING—Why 'tis a name which bears
The more immediate ſtamp of heav'n which wears
The neareſt, beſt reſemblance we can ſhew
Of God above, through all his works below.
To ſtill the voice of diſcord in the land,
To make weak faction's diſcontented band,
Detected, weak, and crumbling to decay,
With hunger pinch'd, on their own vitals prey;
Like brethren, in the ſelf-ſame int'reſts warm'd,
Like diff'rent bodies, with one ſoul inform'd,
To make a nation, nobly rais'd above
All meaner thoughts, grow up in common love;
To give the laws due vigour, and to hold
That ſacred ballance, temperate, yet bold,
With ſuch an equal hand that thoſe who fear
May yet approve, and own my juſtice clear;
To be a common father, to ſecure
The weak from violence, from pride the poor;
Vice, and her ſons, to baniſh in diſgrace,
To make corruption dread to ſhew her face,
To bid afflicted virtue take new ſtate,
And be, at laſt, acquainted with the great;
Of all religions to elect the beſt,
Nor let her prieſts be made a ſtanding jeſt;
Rewards for worth, with lib'ral hand to crave,
To love the arts, nor let the artiſts ſtarve;
To make fair plenty through the realm increaſe,
Give fame in war, and happineſs in peace,
To ſee my people virtuous, great and free,
And know that all thoſe bleſſings flow from me,
O 'tis a joy too exquiſite, a thought
Which flatters nature more than flattery ought,
'Tis a great, glorious taſk, for man too hard,
But not leſs great, leſs glorious the reward,
The beſt reward which here to man is giv'n,
'Tis more than earth, and little ſhort of heav'n;
A taſk (if ſuch compariſon may be)
The ſame in nature, diff'ring in degree,
Like that which God, on whom for aid I call,
Performs with eaſe, and yet performs to all.

He then compares the ſtate of a king with that of a villager. Every one converſant in the claſſics, in our old writers, and particularly Shakeſpeare, will ſee the happy uſe our author has made of his reading. We ſhould be tempted to tranſcribe the whole paſſage, but that the limits of our paper will not allow it. Of the king he obſerves,

CARE, like a ſpectre, ſeen by him alone,
With all her neſt of vipers, round his throne
By day crawl full in view; when night bids ſleep,
Sweet nurſe of nature, o'er the ſenſes creep,
When miſery herſelf, no more complains,
And ſlaves, if poſſible, forget their chains,
Tho' his ſenſe weakens, tho' his eye grows dim,
That reſt which come to all, comes not to him.
E'en at that hour, CARE, tyrant CARE, forbids
The dew of ſleep to fall upon his lids;
From night to night ſhe watches at his bed;
Now, as one mop'd, ſits brooding o'er his head,
Anon ſhe ſtarts, and, borne on raven's wings,
Croaks forth aloud—ſleep was not made for kings.

Proceeding in his ſelf examination he enquires, whether he himſelf is free from thoſe faults, which it is his duty to puniſh in others; after which he reflects upon a proper choice of his miniſters.

Are there, amongſt thoſe officers of ſtate,
To whom our ſacred pow'r we delegate,
Who hold our place of office in the realm,
Who, in our name commiſſion'd, guide the helm,
Are there, who, truſting to our love of eaſe,
Oppreſs our ſubjects, wreſt our juſt decrees,
And make the laws, warp'd from their fair intent,
To ſpeak a language which they never meant.
Are there ſuch men, and can the fools depend
On holding out in ſafety to their end?
Can they ſo much, from thoughts of danger free,
Deceive themſelves, ſo much miſdeem of me,
To think that I will prove a Stateſman's tool,
And live a ſtranger where I ought to rule?
What, to myſelf and to my ſtate unjuſt,
Shall I from miniſters take things on truſt,
And, ſinking low the credit of my throne,
Depend upon dependants of my own?
Shall I, moſt certain ſource of future cares,
Not uſe my judgment, but depend on their's,
Shall I, true puppet-like, be mock'd with ſtate,
Have nothing but the name of being great,
Attend at councils, which I muſt not weigh,
Do, what they bid; and what they dictate, ſay;
Enrob'd, and hoiſted up into my chair,
Only to be a royal cypher there?

Periſh

Perish the thought—'tis treason to my throne;
And who but thinks it, could his thought be known,
Insults me more than He, who, league'd with hell,
Shall rise in arms, and 'gainst my crown rebell.
The wicked Statesman, whose false heart pursues
A train of guilt, who acts with double views,
And wears a double face, whose base designs
Strikes at his monarch's throne, who undermines
E'en whilst he seems his wishes to support,
Who seizes all departments, packs a court,
Maintains an agent on the judgment seat
To screen his crimes, and make his frauds complete,
New models armies, and around the throne
Will suffer none but creatures of his own,
Conscious of such his baseness, well may try,
Against the light to shut his master's eye,
To keep him coop'd, and far remov'd from those,
Who brave and honest, dare his crimes disclose,
Nor ever let him in one place appear,
Where truth, unwelcome truth, may wound his ear,

In the course of this poem our author takes occasion, in the strongest exertion of fancy, and with the most poetical diction to set forth the extatic enjoyments he has received while at leisure to attend to science and the muses. In another part he is no less happy in his description of the industrious bee, not labouring for himself alone, but for the general benefit of the hive. He enumerates the several objects of consideration proper for majesty with respect to laws, religion, &c. &c. and concludes with the following lines.

Let the stern tyrant keep a distant state,
And, hating all men, fear return of hate,
Conscious of guilt, retreat behind his throne,
Secure from all upbraidings but his own,
Let all my subjects have access to Me,
Be my ears open as my heart is free;
In full, fair tide, let information flow,
That evil is half cur'd, whose cause we know,
And thou, where'er thou art, thou wretched thing
Who art afraid to look up to a king,
Lay by thy fears—make but thy grievance plain,
And, if I not redress thee, may my reign
Close up that very moment—to prevent
The course of JUSTICE, from her fair intent,
In vain my nearest, dearest friend shall plead,
In vain my mother kneel—my soul may bleed,
But must not change—when JUSTICE draws the dart,
Tho' it is doom'd to pierce a fav'rite's heart,
'Tis mine to give it force, to give it aim——
I know it duty, and I feel it fame.

To our CORRESPONDENTS.

THE *favours proposed from* Ellesmere *will be very acceptable.*—*Mr.* B. Talbot's *Drawing is received, and a copper-plate shall be engraved and inserted, with the Description, in our next Magazine.*—*Whatever Specific* S. H. *(who dates his letter from Plymouth) may have discovered, he may certainly vend it without any danger from any one; and as the efficacy will, by that means, soon be known, the afflicted as well as himself will speedily be benefited.*—*Mr.* Clarke's *favour is received, and shall be sent as he directs for Mr.* Mortimer.—*We are much obliged to Mr.* Priestly *for his letter, which shall have a due regard paid to it next month, it being too late for this.*

A List of New Books and Pamphlets, to August 25, 1764.

1. ESSAYS on husbandry. 8vo. 5s. in boards. Frederick, at Bath. *See page* 399.

2. Gotham. Book the third. By C. Churchill. 2s. Almon. *See page* 407.

3. A dissertation on the principles of eloquence, with a particular regard to the stile and composition of the New Testament. By Thomas Leland, D. D. 4to. sewed 5s. Johnston.

4. The peerage of Scotland. By Robert Douglas, Esq; Folio. 1l. 15s. Wilson.

5. The cap and staff, or the recantation of the rev. capt. Charles C——ll, addressed to John W———ks, Esq; 2s. 6d. Gibson.

6. Miscellaneous pieces in literature, history and philosophy, translated from the French of Monsr. D'Alembert, 12mo. 3s. bound. Henderson.

7. The

7. The ſongs of Solomon, newly tranſlated from the original Hebrew, with a commentary and annotations. 2s. ſewed. Dodſley.

8. A Collection of poems from ſeveral authors. By James Elphinſton. 3s. 6d. bound. Richardſon.

9. An hiſtory of England, in a ſeries of letters. 2vols. 12mo. 6s. Newberry.

10. The French ſcholar's aſſiſtant. By Peter Magnant. 2s. 6d. Keith.

11. A pronouncing and ſpelling dictionary. By William Johnſton, M. A. 3s. Johnſton.

12. A ſermon preached before the ſons of the clergy. By Richard Hind, D. D. 6d. Bathurſt.

13. A refutation of the reflections againſt inoculation publiſhed by Dr. Raſt, of Lyons. By Anthony Relhan, M. D. 1s. 6d. Johnſton.

14. Sin reigns not, nor ſhall reign in the ſaints: A ſermon. By John Brine. 6d. Keith.

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16. An eaſy introduction to the theory and practice of mechanics. By Samuel Clark. 4to. 6s. ſewed. Nourſe.

17. A Diſſertation on Caſtor oil. By Peter Canvane, M. D. 1s. 6d. Vaillant.

18. Obſervations on divers paſſages of ſcripture. 8vo. 6s. Field.

19. An epithalamium on the nuptials of lord Warkworth, and lady Ann Stuart. By Timoleon Brecknock. 6d. Marſh.

20. Counter addreſs to the public. On the late diſmiſſion of a general officer. 1s. Almon.

21. The divine glories diſplayed in babes and ſucklings. A ſermon. By Thomas Gibbons. 6d. Buckland.

22. A diſſertation on religious toleration. By Mr. de Voltaire. 8vo. 3s. 6d. ſewed. Becket and Dehondt.

23. Buſy bodies anatomized; or, a brief deſcription of one of the moſt miſchievous characters of the preſent age. By James How, M. A. 1s. Dilly.

24. Juvenile poems on ſeveral occaſions. By a gentleman of Oxford. 2s. 6d. bound. Fletcher.

25. An attempt to reſtore the ſupreme worſhip of God the Father Almighty. By George Williams, a livery ſervant. 6d. Becket.

26. Inſtructions for young ladies on their entering into life, and their duties in a married ſtate. By M. Le Prince de Beaumont. 2 vols. 12mo. 6s. bound. Nourſe.

27. A defence of the minority in the Houſe of Commons, on the queſtion relating to general warrants. 1s. Almon.

28. The General. A poem. Inſcribed to the marquis of Granby. 2s. 6d. Nicoll.

29. The complete Free Maſon; or, Multa Paucis. 3s. boards. Steel.

30. The queſtion on ſome late diſmiſſions truly ſtated. 1s. Wilkie.

A CHRONOLOGICAL MEMOIR *of* OCCURRENCES.

For AUGUST, 1764.

FOREIGN AFFAIRS.

RUSSIA.

Peterſburg, July 13. THE empreſs ſet out on Sunday for Riga: her imperial majeſty paſſed three days at Cronſtadt, the weather was very favourable, and the fleet made a magnificent appearance. *Lond. Gaz.*

Stockholm, July 13. The empreſs of Ruſſia has ſent a preſent to the queen of Sweden of ſix horſes from the Ukraine; and her majeſty came on Wedneſday to Carlbourg to ſee them: there are three ſadle horſes, and three for the ſledge. Prince Bariatinſkoi has received the king's picture ſet with diamonds; and alſo a gold ſnuff-box, in the lid of which is the prince royal's picture, ſurrounded likewiſe with diamonds; and the day he took leave, the king made him a knight of the order of the ſword. *Lond. Gaz.*

NETHERLANDS. *Hague, Aug.* 19. Several foreign gazettes, and ſome of thoſe of this country, having miſrepreſented an affair which lately happened at Peterſburgh, adding that there had been a great diſturbance in the Ruſſian empire on account of it, we think it proper to undeceive the publick, by giving them the fact as it happened on the 16th of laſt month. There was in the fortreſs of Schuſſelbourg a certain priſoner of ſtate, who had been ſome time diſordered in his mind, and who was for that and other reaſons guarded by two truſty officers. A young officer of that fortreſs was raſh

raſh enough to undertake to releaſe the priſoner above-mentioned, by means of a forged order, which he produced as from the empreſs, and even engaged his own men to aſſiſt him in it; but they finding the reſiſtance that was made by the people who had the charge of the priſoner, ſuſpected the order to be forged, and therefore abandoned the officer, who was thereupon taken into cuſtody. It appeared by the papers found upon him, as well as from other informations, that this affair was not the effect of any conſpiracy, but merely the raſh attempt of the officer; ſo that it was looked upon at Peterſburgh in the moſt trifling light; and the empreſs, tho' informed of it by her miniſters, continued her journey, wholly unconcerned about it.

POLAND. *Warſaw, July* 4. We received the news yeſterday of a ſmart action in Lithuania, near the little town of Slorim, between prince Radzivil and the Ruſſians, it laſted five hours; when the Ruſſians being joined by a reinforcement from prince Dolgorucki, the Polanders were obliged to retire, which they did in good order, and without being followed. The letters vary in relation to the number ſlain; but a remarkable anecdote is related: the princeſs Radzivil, who is newly married, and a ſiſter of the prince, both of whom are poſſeſſed of youth and beauty, fought on horſeback in this action with ſabres, and encouraged the ſoldiery both by their words and actions.

Warſaw, July 16. We are informed, that ſome of the Grandees take great pains to engage prince Radzivil, Waywode of Wilda, to lay down his arms, and have made him very advantageous offers for that purpoſe. The following letter was wrote to him by the king of Pruſſia.

"*Prince* Radzivil,

"After having anſwered the letter which the count de Pac delivered to me from you, I received your's, dated the 18th of June. The embarraſſing ſituation you are in gives me pain, and I could wiſh you had not reaſon to reproach yourſelf on this account. The ſteps which you took could not fail of the conſequences which you now complain of, and which a more moderate conduct might have prevented. It is dangerous to take ſuch ſteps as under the preſent circumſtances of affairs of Poland, might be productive of the greateſt inconveniencies. The reſolution you took to aſſemble your troops, and engage them to act at Graudence, and ſeveral other places, againſt your countrymen, muſt reaſonably be conſidered as the firſt cauſe of the troubles of the republick, and of all that has happened to yourſelf. It is a hard matter to reconcile the lengths you have lately taken with the duty which a man owes to his country, and with the pacific ſentiments contained in your letters.

"Under theſe circumſtances you will judge that I cannot interfere in what you have brought upon yourſelf; theſe are things, which my ſituation as a neighbour and friend of the republic, will not permit me to enquire into. I have therefore nothing further to add, but to repeat the advice I gave you in my former diſpatches; praying God to keep you under his holy protection."

Berlin, July 3, 1764. FREDERICK.

On the 7th of July a letter was received at Warſaw from Conſtantinople, dated the 2d of June, ſigned with the Grand Signior's own hand, addreſſed to the biſhops, magnats, ſtaroſts, &c. of the kingdom of Poland, recommending them in the ſtrongeſt terms, to union and concord among themſelves; but eſpecially he adviſes them to elect a native of an honourable family, to be their king; aſſuring the republic of his friendſhip and aſſiſtance, as long as they endeavour to merit them. This letter was diſpatched from the Porte by the Ruſſian reſident.

They write from Warſaw, that the workmen had begun the conſtruction of the cola, or electoral camp, in a large field between Wolau, a ſmall town, and that metropolis.

The primate of Poland has ſent his univerſalia to all who hold poſts in that kingdom, giving them notice to be ready to take the oaths to the new king, as ſoon as the election and coronation are over.

GERMANY. *Leipſick, July* 30. Laſt Tueſday our principal market day, the following remarkable example was made of an uncommon cheat and fraudulent bankrupt in this city, named Chriſtopher Frederick Deitz; who, after being fully and lawfully convicted as ſuch, was ſentenced to ſtand expoſed to public view on a ſcaffold before the town houſe from 10 to 12 in the forenoon, with a yellow hat on his head. The next day he was carried to Dreſden there to be impriſoned ſix years, to be kept to hard labour, and to live on bread and water during that time.

Berlin, July 21. M. Badouin, the Pruſſian ſecretary of legation, ſet out from hence yeſterday for England. The king and prince royal of Pruſſia, accompanied by the duke and dutcheſs of Brunſwick, the hereditary prince and princeſs, and the princeſs Elizabeth and Auguſta of Brunſwick, came from Potſdam to Charlottenbourg on the 16th inſt. The ſame day count Finckenſtain acquainted the foreign miniſters reſiding at this

this court, with the intended marriage of the prince royal of Pruſſia with the princeſs Elizabeth of Brunſwick, adding, that his Pruſſian majeſty would be pleaſed to ſee the miniſters at Charlottenbourg, to ſhare in the diverſions that were to be given on this occaſion. On the 18th inſt. the ceremony of betrothing was performed: and in the evening there was an aſſembly, the garden being illuminated: and after ſupper there was a ball, which laſted till morning. *Lond. Gaz.*

Letters from Ratiſbon, of the 4th inſtant, adviſe, that the dyet of the empire, at their laſt aſſembly, deliberated on the high prices of all ſorts of proviſions and firewood, which are kept up by a ſet of avaricious monopolizers, and came to a reſolution to puniſh them with the utmoſt ſeverity of the law; and made ſeveral regulations, in order to be ſupplied with proviſions, &c. out of the country at a cheaper rate.

Letters from Brunſwick, dated the 15th inſtant, bring advice, that prayers had been put up in all the churches in that dutchy, for the happy delivery of her royal highneſs the princeſs Auguſta of England, conſort to the hereditary prince, who had been declared pregnant at that court.

Vevai, in Switzerland, July 25. An experiment was lately made here to prove the efficacy of a method diſcovered by doctor Henchoz, for making wood leſs combuſtible. Several fir billets were produced, which had been previouſly prepared according to the doctor's directions; a large fire was made, and laying on one of the above billets, it remained a conſiderable time uninjured, ſeeming to repel the fire; at laſt, however, it was, with ſome difficulty, conſumed; or rather it mouldered into aſhes, but without emitting any flame. The experiment was repeated ſeveral times, and always with the ſame ſucceſs, by which it was found that in an ordinary fire this wood remained unconſumed. The method of preparing the wood is ſimple; it is only ſoaking it in water in which equal quantities of common ſalt and vitriol have been diſſolved; but the water ſhould be nearly ſaturated, or the ſucceſs will not be ſo certain; the wood is to be dried, and is afterwards fit for any uſe, and ſeems particularly to be adapted to wainſcotting, as that is moſt in danger when a fire breaks out in a houſe.

FRANCE. From Paris they write, that on the 8th of July, in the Diſtrict of St. Stephen in Forez, there was ſo prodigious a ſhower of rain mingled with hail, that in a very few minutes the rivulets in the fields, which were almoſt dry, formed a volume of water, 18 feet high, which rolling with extreme rapidity, carried every thing that lay in its way, corn fields, cattle, trees, rocks, houſes, mills, &c. The ravage was ſo great in ſome cantons and pariſhes, that one ſcarce diſcerns they have been inhabited.

Paris, Auguſt 3. Monday evening we had a ſtorm of lightning, hail, and wind. Several windows were broke, and the lightning greatly damaged the tower of the church of the Celeſtines next the Arſenal. The hail broke a conſiderable quantity of glaſs in the caſtle of Verſailles, particularly in the grand gallery. The hopes of the harveſt are entirely deſtroyed where the ſtorm reached.

17. The earl of Hertford, who was commiſſioned by the duke of York to provide a hotel for his [illegible] has hired that which was formerly occupied by Madame d'Averne, in the Rue St. Honore, oppoſite the capuchins, which is now furniſhing for the reception of his royal highneſs. *Bruſſels Gazette.*

ITALY. *Venice, July* 11.

On the 29th paſt his royal highneſs the duke of York came hither from Padua, and the next morning went to the Arſenal, and on board the different ſhips that were upon the ſtocks, at which his royal highneſs expreſſed great ſatisfaction; and in the afternoon returned to Padua. On the 3d inſtant his royal highneſs was pleaſed to accept of a dinner from the providitor; and after taking leave of his excellency, in his box at the threatre, ſet forward, at break of day, for Milan, and arrived that night early at Breſcia. *Lond. Gaz.*

Turin, July 11. His royal highneſs the duke of York arrived here this morning, and was met at ſome diſtance from this place by the maſter of the ceremonies, and his deputy, in two of his Sardinian majeſty's coaches, and conducted to the palace prepared for his reception; and ſoon after received the compliments upon his ſafe arrival, on the part of the king, the duke of Savoy, and the reſt of the royal family; to all of whom his royal highneſs a few hours after paid his viſit, which was received with all the marks of friendſhip and cordiality. *Lond. Gaz.*

28. On Saturday laſt the 21ſt inſtant, his royal highneſs the duke of York received a friendly viſit from the duke of Savoy, the prince of Piedmont, and the duke of Chablais; and the day following his royal highneſs dined with his Sardinian majeſty. The ſame night a magnificent ſupper and a great ball were given at the palace which his royal highneſs occupies; and two days after, the prince of Carignan, who was in the

the country fifteen miles from Turin, came from thence to pay his reſpects to his royal highneſs, whom he invited to dine with him at his beautiful ſeat of Raconis; where he likewiſe aſked a number of the moſt conſpicuous of the ladies and noblemen of this court to come to a dinner, a concert, and a ball, which, altogether, made it a moſt compleat and agreeable entertainment. Laſt Thurſday his royal highneſs took leave of the king of Sardinia, and the reſt of the royal family, by all of whom he was ſincerely regretted; and Yeſterday early in the morning, his royal highneſs left Turin to go to Genoa. *Lond. Gaz.*

Genoa, July 28. His royal highneſs the duke of York arrived here this morning in perfect health. His royal highneſs was complimented by the government of Novi, at a ſmall diſtance from that town. This afternoon the maſter of the ceremonies waited on, and complimented his royal highneſs on his ſafe arrival, and acquainted him, that the republick had named ſix nobles, as a deputation from the republick; his royal highneſs returned his thanks, and declined to accept of the deputation. The republick will endeavour to amuſe his royal highneſs with diverſions of balls; and preparations are making to give a maſqued ball at the Theatre to-morrow night.—The magiſtrates of Health of this city, have augmented the quarentine from Naples to ſixteen days. *Lond. Gaz.*

A M E R I C A.

THE Duke of Cumberland Packet-boat, arrived from New-York with a mail, brought the following advices.

From the Boſton Gazette.

Providence, June 30. Capt. William Earl, who arrived here ſince our laſt, in twenty days from Monti Chriſto, informs us, that a few days before he left that port, certain advice was received there by a Spaniſh veſſel from Turks Iſland, that a French man of war of 64 guns, one xebeck, a ſnow, and a ſloop, from Cape François, all well equipped, had diſpoſſeſſed the Engliſh ſettlers from Turks Iſland, and taken poſſeſſion thereof, with all the Engliſh ſhipping that were there, conſiſting of nine ſail, on board of which they embarked the inhabitants, and ſent them away, but for what place could not be diſcovered: That they had burnt and deſtroyed every houſe, and ſecured as many of the ſlaves as they were able to find. As the Spaniards claim this place, tho' the Engliſh have principally enjoyed it, as ſoon as the governor of the Mount was made acquainted with the affair, he diſpatched an expreſs to the governor general of St. Domingo, to adviſe him of theſe hoſtilities of the French.

From the Penſylvania Gazette.

Philadelphia, July 5. By Capt. Claxton, from Turks Iſland, we are informed, that on the firſt day of June a French 74 gun ſhip, with a ſnow, ſloop and xebeque, came there from Cape François; turned off our people (about 200) that were making ſalt, plundered and burnt their cabbins, and carried them, with the Engliſh veſſels (about nine ſail) to the cape, where they were kept one night, and then ordered to go where they pleaſed, only not to return to Turks Iſland; that the French brought a number of people with them, among which were ſome tradeſmen, ſaid to be deſigned to build a fort; and that they had erected a light-houſe there. One of the veſſels, we hear, went immediately to Jamaica, to inform the admiral of what had happened. Our veſſels, as well as the people on the iſland, were robbed of ſundry things by the French.

From the New-York Gazette.

New York, July 12. One of the ſloops that was carried into Cape François, in company with Capt. Claxton, by a French man of war, arrived here laſt Monday, and confirms the account he brought; but we are ſince credibly informed, that an Engliſh frigate having occaſion to call at Turks Iſland, and obſerving the French erecting ſome works there, ordered them to deſiſt; but they not chuſing to comply, the Engliſh commander landed part of his crew, killed 28 Frenchmen, and took ſeveral priſoners.

Turks Iſland is about three leagues to the northward of Hiſpaniola, and is the entire property of the French. The Bermudians never had any legal right to make ſalt there: They manufactured this commodity merely thro' the permiſſion of the owners; the French conſtantly ſupplying themſelves with a ſufficient quantity from Hiſpaniola; it muſt therefore be preſumed, that the Bermudians took too much liberty in the iſland, as they never before had been diſturbed in the proſecution of this trade.

IRELAND.

Dublin, Aug. 11.

TUeſday, when the lord-mayor, recorder, aldermen, and ſheriffs, attended by 22 corporations, perambulated the liberties and franchiſes of this city, according to triennial cuſtom, the following poem was printed in a carriage belonging to the company of ſtationers, (which moved in the proceſſion) and was diſperſed among the ſpectators.

The ART *of* PRINTING. *A Poem.*

HAIL MYSTICK ART! which men like angels taught,
To ſpeak to eyes, and paint unbody'd thought!
Though deaf and dumb; bleſt ſkill, reliev'd by Thee,
We make one ſenſe perform the taſk of three.
We ſee, we hear, we touch the head and heart,
And take, or give, what each but yields in part.
With the hard laws of diſtance we diſpence,
And, without ſound, apart, commune in ſenſe:
View, though confin'd, nay rule this earthly ball,
And travel o'er the wide expanded ALL.
Dead letters thus with living notions fraught,
Prove to the ſoul the teleſcopes of thought;
To mortal life a deathleſs witneſs give;
And bid all deeds and titles laſt, and live.
In ſcanty LIFE, ETERNITY we taſte;
View the firſt ages, and inform the laſt.
Arts, hiſt'ry, laws, we purchaſe with a look,
And keep, like FATE, all NATURE in a BOOK.

COUNTRY.

ON Sunday the 15th of July died, in the 125th year of his age, George Kirton, of Oxnop hall, near Reeth, in the county of York, Eſq; A gentleman more remarkable for fox hunting than the famous Mr. Draper; for after following the chace on horſeback 'till he was upwards of 80, ſo great was his deſire for the diverſion, that ('till he was 100 years old) he regularly attended the unkennelling the fox in his ſingle horſe chair: and as a proof that length of days are not alway entailed on a life of temperance and ſobriety, he was an inſtance to the contrary; for no man, even 'till within ten years of his death made freer with the bottle. His eſtate which is pretty conſiderable, and has been in the family near three centuries, deſcends to his ſon, Thomas Kirton Eſq; an eminent phyſician in Yarm.

LONDON.

Aug. 1. A Few days ſince came on before lord Mansfield at Guildhall, a remarkable cauſe, wherein one James Murrel, a porter, was plaintiff, and one Barwell, clerk of the Bloſſom Inn, Laurence Lane, defendant, on an action for an aſſault; when after many learned arguments on both ſides, the jury brought in a verdict with one farthing damage. The reaſon of the jury's bringing in ſo ſmall a damage, was, to deter people from entering into litigious actions.

Laſt Saturday at Guildhall the writ of inquiry of damages was executed in the behalf of the 3 journeymen taylers, who were illegally impriſoned in Woodſtreet-Compter three days by the deputy keeper, in April laſt: when on an examination of near four hours, and on hearing the council on both ſides, the jury gave 40l. damages to each (beſides coſts of ſuit.) And we hear there are three more actions at the ſame plaintiffs' ſuit depending, which will be tried next term, againſt the deputy keeper, on the Habeas Corpus act (which is 100l. penalty) for not granting them a copy of their warrant of commitment.

Sunday laſt the right hon. the marquis of Carnarvon reſigned his place as lord of the bedchamber in waiting to his majeſty.

2. Yeſterday George Amyand, and — Gordon, Eſqrs. kiſſed his majeſty's hand on their being created baronets.

Yeſterday, at a court of lieutenancy held at Guildhall, a complaint which had been made ſome time ago, relative to a diſpute between a lieutenant colonel and a major, in one of the city regiments, was taken into conſideration; when it appearing that the former was the aggreſſor, he was ſentenced to aſk the major's pardon.

St. James's, Aug. 3. His majeſty in council was this day pleaſed to order, that the parliament, which ſtands prorogued to Tueſ-

Tuesday the 16th of this instant August, should be further prorogued to Tuesday the 30th day of October next.

6. Yesterday the under-sheriff of Middlesex made proclamation, at the great door of St. Margaret's church, Westminster, for John Wilkes, Esq; late of the same parish, to appear on the 6th day of November next, before the king himself at Westminster.

7. Saturday last, the sessions of gaol delivery was held by adjournment at the Old Bailey, when 12 convicts who had been capitally convicted, received his majesty's mercy on the following conditions: eight to be transported for life, three to be transported for the term of fourteen years, and one to be transported for seven years. Amongst them who are to be transported for life is Michael Sampson, convicted in May sessions of forging a note on Messf. Boldero and Co. When Capt. Sampson was brought to the bar, on being asked whether he would accept of his majesty's pardon, on condition of going abroad for life, he addressed himself to the court in the following terms:

"My Lord,

"It is entirely above my comprehension, to express the gratitude and thanks I owe, for such an extraordinary mercy to an unfortunate young man, whose life was forfeited to pulbic justice. I most humbly accept of the proffered terms, and will never cease to pray for the eternal happiness of my most benevolent king, thro' whose most gracious mercy I now exist. Words cannot, my Lord, yet my future conduct shall demonstrate, that it may not be amiss sometimes to temper justice with mercy. And I most humbly return your lordship, and this Hon. court, my most grateful thanks for the trouble they have been at, and for their generous behaviour to me."

8. Sunday in the afternoon as a gentleman was looking on his gold watch by Westminster-abbey, to see how it went with that clock, a soldier of the foot-guards snatched it out of his hand, and run off; but some gentlemen coming up, they all pursued him, took him out of a house into which he ran in Great Peter-street, and secured him, and on Monday he was carried before a magistrate, who committed him to the Gatehouse. He had dropped the watch in his flight, which a person seeing, picked it up, and restored it to the owner.

13. Yesterday there was a splendid court at St. James's, to compliment their majesties on the birth day of his royal highness the prince of Wales. Several of the nobility went to the queen's palace to pay their compliments to his royal highness.—Yesterday morning his royal highness the Duke of Cumberland came to town from Windsor, and afterwards waited on their majesties on the above occasion.

B——KR——TS.

July 28. William Bush, of Gracechurch-street, London, Woollen-draper.—Bridges Harvey, of Wolverhampton in the county of Stafford, Ironmonger.—John Armstrong, late of Rea in Scotland, but now of the King's Bench Prison, in Southwark, Dealer and Chapman.

31. Thomas Scholes of London, and John Milne, of Rochdale, Lancashire, warehousemen.—Peter Dorning, of Risley within Culceth, Lancashire, tanner.—Plowden Jennett, of Birmingham, linnen-draper.—Ann Finch, of St. Giles's Cripple-gate, linnen draper.

August 4. James Stephenson of Liverpool, druggist.

7. Anthony Gardiner, late of Barbourn-Wharf, Worcestershire, dealer in salt.

11. Edmond Peele, of Faversham in Norfolk, dealer.—Thomas Rossiter, of Gerard street, Soho, haberdasher.

18. Wm. Noone, jun. of Long-acre, cheesemonger.—Rachel Embry, of Tewkesbury in Gloucestershire, spinster, millener and hosier.—Peter Spinks, of Southampton, brewer.—Lawrence Richardson, and Tho. Richardson, of St. Luke, brewers.

25. Peter Graham, late of Whit Castles, Annandale, in North Briton, but now or late of Brampton, in Cumberland, dealer.—George Kearsly, of St. Martin, Ludgate, bookseller and stationer.

BILL *of Mortality from* July 24. *to* Aug. 21.

Buried,			Christened,		
Males — 757	} 1509		Males — 619	} 1193	
Females 752			Females 574		
Under 2 years old	562				
Between 2 and 5	129		Buried,		
5 and 10 ——	58		Within the Walls	62	
10 and 20 ——	56		Without ——	397	
20 and 30 ——	121		*Midd.* and *Surry*	789	
30 and 40 ——	141		City & Sub. *West.*	261	
40 and 50 ——	157				1509
50 and 60 ——	103				
60 and 70 ——	99		Weekly, *July* 31.	388	
70 and 80 ——	52		*Aug.* 7.	395	
80 and 90 ——	27		14.	338	
90 and 100 ——	4		21.	388	
100 and 109 ——	0				1509
	1509				

N. B. *The Births, Marriages, and Deaths will be in our next.*

Each Day's Price of STOCKS, in August 1764.

☞ Books shut, is signified thus, ——

Aug.	BANK Stock.	In. Stock.	South Sea	3½ per Cen Old Ann.	Dit. New Ann.	3 per C.B. A. redu'd	Ditto consol.	Ditto 1726.	Ditto 1751.	3 per C. India An.	3½ B. An. 1756.	Ditto 1758.	India Bon l. s. d.	Wind at Deal.	Weather at Lond.
31	——	145¾	——	83⅜	——	84¾	84¼	——	——	82⅛	——	89	1 8 o	SW	rain
1	113¼	146	——	83⅝	——	84⅛	84⅞	——	83⅜	——	——	Do	Do	WSW	Do
2	113½	Do	——	84¼	——	85⅛	Do	——	——	82⅜	——	——	1 10 o	W	Do
3	113¼	146¼	——	84	83¼	Do	85	——	82¼	——	87½	89	Do	WNW	Do
4	113⅜	——	——	83¾	——	84⅝	84⅝	——	——	82⅛	——	89⅛	1 13 o	Do	fair
5	Sunday.													SW	Do
6	——	146½	——	——	82⅝	84⅜	84⅜	——	——	——	——	——	Do	Do	Do
7	——	147	——	83	——	Do	84¼	——	——	81¾	——	69	1 12 o	Do	rain
8	113½	147½	——	——	82⅛	Do	Do	——	82	Do	87½	——	1 11 o	ENE	Do
9	Do	Do	——	83	——	84	83⅞	——	Do	Do	86	88⅝	1 10 o	NE	fair
10	Do	148	——	——	82⅝	84⅛	84	——	Do	——	86¼	Do	1 12 o	ENE	Do
11	Do	146½	92¾	83⅛	——	Do	Do	——	——	81⅝	——	Do	1 13 o	NE	Do
12	Sunday.													S	Do
13	113¼	149	——	——	——	Do	84⅛	——	——	81¾	——	——	1 17 o	SW	rain
14	——	Do	——	——	——	Do	84	——	——	——	——	——	1 16 o	Do	Do
15	113½	Do	93	83	82⅜	84	83⅞	——	81¾	——	——	——	Do	Do	ra. & th.
16	——	148½	——	82¾	——	83⅝	85½	——	Do	81½	——	88⅛	Do	Do	rain
17	113⅛	147	——	83¼	81¼	83⅛	83	——	80¾	81¼	86½	——	2 0 o	W	fair
18	Do	147½	93	Do	82	83½	83⅛	——	——	81½	——	87½	1 18 o	SW	rain
19	Sunday.													NNW	Do
20	——	147¼	——	——	81⅝	83¼	83	——	81	81½	——	87¼	1 19 o	W	fair
21	113	Do	——	82¾	——	83⅛	Do	——	Do	81⅜	——	87⅜	1 15 o	N	fine
22	Do	147½	——	——	81½	83⅜	83¼	——	81¼	81¾	——	87½	1 10 o	E	Do
23	——	148	——	82¼	——	Do	Do	——	——	Do	——	87⅝	1 11 o	NE	Do
24	113⅛	Do	——	——	81⅝	Do	Do	21	81	——	——	——	Do	Do	Do
25	——	147¼	——	82⅛	81½	Do	83	——	81¼	——	——	——	1 14 o	E	Do
26	Sunday.													Do	Do
27	——	147¼	——	——	81⅜	83¼	83	——	——	——	——	——	1 16 o	SSE	Do
28	——	146¼	——	82¼	——	Do	83¼	——	——	81	——	87⅜	1 18 o	EbS	Do
29	113½	147	——	——	81½	83⅜	83⅛	——	80⅞	——	85½	87⅜	Do		rain

London: The Peck Loaf to weigh 17 lb. 6 Oz. 0 Dr. Wheaten, to be sold for 2s. 2d. ½

The GENERAL MAGAZINE,

For *SEPTEMBER*, 1764.

On the LAWS *of* ENGLAND.

To the Editors of the GENERAL MAGAZINE.

Illegal Commitment.

A Juſtice of the Peace having lately committed a perſon for not paying a forfeiture impoſed by act of parliament, before any attempt made to levy the ſame by diſtreſs, and inſiſting that he could juſtify ſuch commitment by law, give me leave to inform his worſhip that

I. *Such commitment is illegal.*

II. *What ought to have been done previouſly thereto.*

Laſtly, That he is liable to an action of falſe impriſonment.

My lord chief juſtice *Holt* ſays, that in ſummary proceedings, the right of an Engliſhman of being tried *per Pares ſuos*, is taken away, and therefore the court is to conſtrue them ſtrictly, ſo far as to ſee that the fact is an offence within the act, and that the juſtices proceed accordingly. *Salk* 378. Lord *Raym.* 582.

As to the firſt,

C. was brought into the court of King's Bench, upon an *Habeas Corpus*, to which the warrant of his commitment was returned; and upon exception taken thereto, he was diſcharged; the exception was that it did not appear, that the defendant had not ſufficient diſtreſs (he being committed upon a conviction upon the act (3 & 4 W. & M. c. 10.) of deer ſtealing) and therefore it was ill; *for if he had ſufficient diſtreſs, the juſtices of peace had not any power to commit him to priſon*; but the warrant of commitment only recited, that C of the pariſh of H. in the county of M. was convict, &c. and becauſe he did not pay the forfeiture, the juſtice iſſued his warrant, directed to all conſtables, &c. to require them, to levy the forfeiture by diſtreſs, &c. and that the conſtables of S. M. in the ſaid county had made return, that the defendant had no goods in H. theſe are therefore, &c. And by *Holt* and *Gould*, juſtices, the act of parliament is not purſued, for the return of the conſtable is nothing to the purpoſe. Indeed a warrant is appointed by the ſtatute to be iſſued and returned; but the ſtatute does not ſay, that upon the return to the warrant, that he has not ſufficient diſtreſs, he ſhall ſuffer impriſonment, &c. but that *for want* of diſtreſs he ſhall ſuffer impriſonment, &c. and therefore if there is no diſtreſs, nor the pecuniary penalty paid, the remedy for that ceaſes, and the offender ought to ſuffer another puniſhment, and judgment ought to be given for that, and there ought to be more than a bare commitment. Lord *Raym.* 545.

As to the ſecond. What ought to have been done previous to ſuch commitment.

If the party was preſent, as in this caſe, upon the conviction, the juſtice ought to adjudge that he ſhould pay the money as the act appoints, and then he ought to detain him for two days, to diſcover if he hath ſufficient diſtreſs; and if it appears, that he hath not, then he

BANK [In. Stock | South Sea | per Cent | Dit. New | 3 per C. B. | Ditto | Ditto | Ditto | 3 per C. | 3½ B. An. | Ditto | India Bon | Wind at | Weather
Each Day's Price of STOCKS, in Auguſt 1764.
Books ſtuit, is ſignified thus, ——

ought to record it, and give judgment that he ſhall ſuffer impriſonment, and commit him preſently. But if the party was not preſent, then he ought to proceed in this manner. Firſt he ought to iſſue his warrant for levying the money by diſtreſs, and if it appears to him by the return of the warrant, that there is not ſufficient diſtreſs, then he ought to record that he hath no diſtreſs, and therefore award that he ſhall be committed, &c. and upon that iſſue his warrant. But a man ought not to continue in priſon upon a bare recital in a warrant without any adjudication. There ought to be a judicial determination, where ſuch infamous puniſhment is to be afflicted. It is ſaid in 8 Co. 120. a. Dr *Bonham*'s caſe, that there ought to be a record made of it. Lord *Raym.* 545, 546. 12 *Mod.* 316.

Laſtly, That a juſtice of peace is liable to an action of falſe impriſonment.

The defendant B. being a juſtice of peace, had convicted the plaintiff for deſtroying game, and tho' (as it was proved) the plaintiff had effects of his own which might have been diſtrained, which were ſufficient to anſwer the penalty he had incurred, yet the defendant ſent him immediately to *Bridewell*, without endeavouring to levy the penalty upon his goods: and an action of treſpaſs and falſe impriſonment being brought againſt B. for this commitment, the late chief juſtice *Lee* was of opinion, that the action well lay.

The other defendant was the conſtable, who had executed this warrant of commitment; and as to him it was agreed, that the warrant was a ſufficient juſtification, it being in a matter within the juriſdiction of the juſtice of peace: but if a juſtice of peace makes a warrant in a caſe which is plainly out of his juriſdiction, ſuch warrant is no juſtification to a conſtable.

And it was agreed, that where actions of this kind are brought againſt juſtices of peace, they are obliged to ſhew the regularity of their convictions; and the informations, &c. laid before them upon which their convictions are grounded, muſt be produced and proved in court. Stra. 710. Seſs. Cas. p. 371. pl. 397.

To the Publiſher of the General Magazine.
Method to evade Proceſs of the Law.

SIR,

WHEREAS John of Waleys peaceably and on behalf of the archbiſhop entered the houſe of Bogs of Clare, within the city of London, and there produced a citation, ſome of the family of the aforeſaid Bogs, made the ſame John eat up the citation, and alſo the ſeal by force and againſt his will, and alſo impriſoned and ill-treated him, againſt the king's peace, to the damage of the ſame John, and in contempt of the lord the king. See Prynn's Regiſter of Writs. 4 Part, P. 825.

To the Printer of the General Magazine.

I hope the law part of your Magazine, will admit the following *Quere*, and with propriety too, as it profeſſes to reſolve all legal queſtions.

Yours, &c.

IF A. commences an action againſt a peer of the realm, who, in order to defeat A of ſuch action, takes advantage of his privilege and refuſes to appear, and in the interim

him proſecutes A, who thereupon abſconds, and in conſequence thereof is out-lawed before the peer has entered any appearance, can the ſaid peer upon entering his appearance plead the ſaid out-lawry in abatement of A's action?

To the Proprietors of the General Magazine.

Lord Chief Juſtice Hale's *Opinion of the Juriſdiction of the* Forum humanum *bad in its Conſequence.*

SIR,

MY lord chief juſtice Hale (hiſt. pl. cr. p. 429.) ſays

"If a man either *by working upon the fancy of another*, or poſſibly by harſh or unkind uſage, put another into ſuch paſſion of *grief* or fear, that the party either die ſuddenly, or *contract ſome diſeaſe*, whereof he dies, though as the circumſtances of the caſe may be murder or manſlaughter in the ſight of God, yet *in Foro humano* it cannot come under the judgment of felony, becauſe no external act of violence was offered, whereof the common law can take notice, and ſecret things belong to God; and hence it was, that before the ſtatute of 1 Jac. c 12. [repealed by 9 Geo. 2. c. 5.] Witchcraft or faſcination was not felony, becauſe it wanted a trial, though ſome conſtitutions of the civil law make it penal."

The conſequence of the ſanction of ſo reſpectable a name and authority (for the chief juſtice was an excellent chriſtian, as well as an able and upright judge) cannot be better inſtanced than in the following very extraordinary caſe.

"An unfortunate wife who had been ſo cruelly treated by her huſband, that life itſelf was become a burden to her; at laſt made her application to her brother, who was a clergyman, and inclined by all the motives of chriſtianity to aſſiſt her. He received her into his houſe, with her ſpirits quite oppreſſed and ſunk by her huſband's ſeverity, which had ſo far affected her conſtitution, that ſhe was in a very bad ſtate of health. He went to her huſband, and in the ſofteſt terms repreſented his unmannerly treatment of his wife, and the ſad effects it had upon her; and endeavoured by all poſſible arguments, to awaken in his mind ſome ſentiments of common humanity; adding, that (with his leave) ſhe ſhould be welcome to ſtay at his houſe, till ſhe had recovered her health, of which he would be at the ſole expence. But, alas! how unavailing is reaſon, and ſoft perſuaſions, when oppoſed to *inſolent power*, and *arbitrary* will. The huſband inſiſted upon his *right* to *controul*; it was an invaſion of his *prerogative royal* for his wife to pretend to expoſtulate, and in ſhort he ordered her brother to ſend her home again, or keep her at his *peril*. This was the unhappy creature's laſt effort; and this ill ſucceſs, flung her into a lingering *fever*, of which ſhe languiſhed a fortnight, when her huſband came in perſon, and demanded his wife. Her brother was forced to deliver her up, being as unable to contend with her huſband, as the ſenator of Rome with the emperor, when he declared he was never aſhamed to give up an argument to a man, who was maſter of fifty legions. Thus the miſerable wife was carried home again, where her huſband, exaſperated by her complaint, treated her with great harſhneſs, which gave her her *coup de grace* in leſs than a month; when ſhe left her ſufferings to be avenged by Heaven, though they were diſregarded by men,

from whom ſhe could find no redreſs, her huſband *never having beaten her, nor threatened her life*, though he took all other methods to break her heart."

To the Author of the General Magazine.
A Law Queſtion concerning the Highways.

SIR,

HAving occaſion ſome time ago to conſult the laws made for the regulation of carmen, &c. I did not obſerve any proviſion made concerning perſons leaving their carriages without any drivers at all on the highways, as this ſeems to me a very great deficiency in thoſe laws, ſhould be glad to be informed whether, as there is a penalty for riding on the ſhafts, not having ſome body to guide the horſes, which offence does not ſeem productive of ſo much miſchief as the above, and as penal laws are to be conſtrued ſtrictly, the minor offence is included in the major.

A Sufferer.

CASE *of Bankruptcy and an Award.*

A. In conſideration of 150*l.* lent, had a judgment given him by T. B, for 200*l.* A. enters up the judgment, and takes out a *fieri facias* thereon ret. 15 *paſc*, dated 12th *Feb.* 15 G. 2.

The *fieri facias* was left at the ſheriffs office, by virtue whereof, on or about 5th April following the ſheriff took poſſeſſion of B's goods, an inventory was made, and the ſame were duly appraiſed. And on the 6th April, 1742, the ſheriff made a bill of ſale thereof, to one C, in truſt for plantiff, and with his conſent.

B. at the requeſt of A. continued in poſſeſſion of the goods as his truſtee only.

About a commiſſion of bankruptcy was taken out againſt B, and upon an act of bankruptcy was proved to have been committed, and not before, being after the time of taking poſſeſſion as aforeſaid, by virtue whereof, a meſſenger is ſent to take poſſeſſion of B's goods, and upon the 13th of May, 1742, he takes poſſeſſion according, and found the goods, &c. in poſſeſſion of B, and as ſuch are claimed by the aſſignee of the bankrupt's effects.

The ſaid aſſignee and A. have by bonds of arbitration (the ſaid aſſignee being firſt duly authorized by the conſent of the creditors, as the ſtatute directs) agreed to leave this diſpute to the determination of H. and R. who upon examination have found the fact to be as above ſtated, and that no fraud whatever was committed, meant or intended by the ſaid A or B, and therefore have agreed to award that the aſſignee return to the ſaid A, the goods which were taken in execution, in order for the ſatisfaction of the debtor, and coſts due on the judgment, and that A pay the money which remains after ſatisfaction of the judgment and coſts to the ſaid aſſignee.

Q. Will not the aſſignee be ſufficiently indemnified againſt the claim of the reſt of the creditors by payment of the money and coſts purſuant to the ſaid intended award, and is not the determination of the ſaid arbitrators ſo far agreeable to law and juſtice that the court of Chancery on complaint would not ſet aſide the ſame, provided the facts appear as above ſtated.

I ſuppoſe that the judgment to A was a fair tranſaction and that the execution

execution was executed before any Act of bankruptcy committed, and that by virtue of the ſheriffs bill of ſale to A, became the proprietor of the goods—Yet as he, after he was the owner thereof, was permitted to have the poſſeſſion thereof, and to uſe the ſame as the owner: for he had not only the poſſeſſion, but the uſe, and the ſame continuing in the poſſeſſion and uſe of B at the time of the bankruptcy, theſe goods became veſted in the commiſſioners by the clauſe of the 21 *Jac.* c. 19. § 11. And A can be conſidered no otherwiſe than as a creditor, and therefore I think the making an award in favour of A will be unjuſt, and what the arbitrators ought not to do.

J. STRANGE.

To the Author of the General Magazine.

A Remark on Doctor Burn's *eccleſiaſtical Law.*

SIR,

IN 1 vol. p. 98. of Dr Burn's eccleſiaſtical law, he ſays that lord Coke, the late lord chancellor King, and Dr. Watſon, ſeem to be all of opinion than an infant heir, though ever ſo young, ſhall preſent to the church, and if but a year old, or younger, the guardian ought to put a pen in his hand, and guide it to ſign the preſentation. Upon which I beg leave to obſerve,

That it hath been ſaid, and it ſeems the moſt reaſonable method, that if the heir be within the years of diſcretion, the guardian ſhall preſent. *Cro. Jac.* 99. for no moral act can be imputable to an infant within years of diſcretion; and the notion of making an infant act by guiding the pen in his hand is abſurd, and the reaſon given by lord Coke, why the guardian ſhall not preſent, is not eaſily to be underſtood; viz. that ſimony is odious, therefore a guardian ſhall not preſent, becauſe he can take nothing for which he may account to the heir; admit this, will guiding the pen in the infant's hand prevent ſimony? or can there be any eſſential difference between allowing the guardian to guide the infant's hand, and permitting him to ſign his name?

Trinity vacation, 1764.

PHILONOMOS.

To the Publiſher of the General Magazine.

Of the preſent Exiſtence of the Laws of England *againſt Papiſts.*

SIR,

IN the monthly review for May laſt, page 412, Art. 10, is an opinion of a very alarming nature, it is no leſs than that "the *ſevere* laws againſt *Roman Catholics* do *not* ſubſiſt at preſent:" hear the learned doctor *Burn*.

"In peruſing the laws againſt papiſts, it will occur poſſibly to remark, that they are many and perhaps ſevere, but it ought to be conſidered withal, how proteſtants are treated in popiſh countries; and that the offences intended to be guarded againſt by theſe laws, are not the ſtealing of an ox, or the burning of an houſe, or any other invaſion of private property, but dethroning the prince and overturning the government.

"'Tis true, theſe laws in the preſent age have been permitted to ſleep in a great meaſure, and that even at a time when a rebellion was advancing, and a foreign invaſion attempted in favour of a popiſh prince and government: but they are ſuffered nevertheleſs to continue in

in force; perhaps that it may appear to the enemies of our conſtitution, that if they are ſpared, it is not for want of power, but of inclination to puniſh. 2 *Burn's* Juſtice, *quarto*, p. 328.

A PROTESTANT.

To the Author of the General Magazine.

Anecdotes concerning the late Mr Viner, *Author of the General Abridgment.*

SIR,

As anecdotes concerncing a writer on the laws of England ſeem not altogether inconſiſtent with the law part of your Magazine, your inſerting the enſuing ones will oblige

A PURCHASER.

THE writer alluded to, was a pretty voluminous one, viz. Charles Viner, Eſq; author of the general abridgment of law and equity, in twenty-three volumes folio. It is remarkable that this gentleman was moſt egregiouſly miſtaken in his notions, as well of *law* as equity, for at the ſittings at Guildhall after Michaelmas term, 1747, a cauſe wherein one Worth (a perſon Mr. Viner had employed to aſſiſt him in preparing the above abridgment for the preſs) was plantiff and the ſaid Mr. Viner defendant, was tried, the action was brought for a year's wages, but Mr. Viner inſiſted that he agreed with the plaintiff for a year's ſervice, and as the plantiff thought proper to leave his ſervice before the expiration of the year, that he had forfeited all his right to wages, however Mr. Viner was caſt, and in conſequence thereof, you will find the following anecdote concerning that affair in the firſt volume of the abridgment, p. 8, 9. as it is very ſingular, and not generally known, it is here tranſcribed *verbatim*, and is as follows, viz.

" Finding that gentlemen are in great expectation of the caſe of *Worth* and *Viner*, tried at Guildhall in *December* laſt, and recommended at the ſame time by Sir *John Strange* (of councel againſt the defendant) to be inſerted in his abridgment, I fully intended to have obliged thoſe gentlemen with it under this head, and this letter of of title *apportionment*: and for that purpoſe thought it could not be improper to crave his aſſiſtance, which I did by a letter to him as follows, viz.

SIR,

Being aſſured by ſeveral gentlemen, as well as news-papers of the honour you did me publickly at Guildhall *in laſt* December, *to recommend my publiſhing, in my* abridgment, *the cauſe then tried of* Worth *and* Viner, *I muſt intreat the favour of your accepting my thanks for it.*

But as I cannot do myſelf the honour of complying with your recommendation, without being ſupplied with a true report of the caſe, I muſt beg the favour of your ſupplying me with it, and do aſſure you I will take care to publiſh it.

I have likewiſe this further favour to deſire of you, that you will point out to me ſome caſes, or one ſingle caſe at leaſt, out of the year books, Fitzherbert, *or* Brooke, *or any book of reports ſince, down to this time, wherein it has been adjudged that a contract for wages is apportionable; becauſe I perceive ſome gentlemen have always taken the law to be otherwiſe, and I would willingly have the point cleared up to them, which my next volume will give me an opportunity of doing, under the head of Title* apportionment, *and you will thereby highly oblige,*

Inner Temple, Sir, your moſt
18 *June*, 1747. Obedient, &c.

In

In conſequence of which letter, a gentleman, at Sir *John*'s requeſt, came to me about ten days after the receipt thereof, to acquaint me that Sir *John* had looked over his papers, but could not find any memorandums to enable him to give me a report of the caſe; nor did his memory otherwiſe ſerve for the doing of it. Whereupon I told the gentleman, that there was another part of my letter deſiring the favour of ſome one caſe as to the point of apportioning contracts for ſervants wages; but as to that Sir *John* had ſent me no anſwer. I then mentioned, that I never yet had met with any caſe that would ſupport ſuch apportionment, nor could I find any gentleman at the bar that had, though I had aſked ſeveral; that I thought every gentleman ought to do the beſt he could for his client, ſo far as was conſiſtent with juſtice, but he ought to ſtop there; that any proceeding further, and ſo procuring injuſtice to the other ſide, is utterly unjuſtifiable; and that, if there was no caſe to ſupport ſuch apportionment, the verdict was againſt law.

As I have not heard from Sir *John* ſince, I am left to ſuppoſe that he has not yet met with his papers, or found any caſe to ſupport what he had laid down ſo earneſtly and preſſingly to the jury, that they were guided by him, and not by the court, who (as I am aſſured by all the gentlemen that I ever yet heard ſpeak of it) ſummed up the evidence ſtrongly for the defendant.

That the agreement for a year's ſervice was fully proved, both under the hand of the plaintiff, and likewiſe from his own mouth poſitively, and without any *ſalvo*, is matter of fact, and undeniable, viz. that he had agreed with the defendant for ſo much a year from the Midſummer following. Not a word has been ſuggeſted to be then dropt, to qualify or abridge the agreement, whereby it might be conſtrued otherwiſe than for a year abſolutely. But in order to get over this, and to enervate ſuch ſtrong and poſitive proof, recourſe was had by Sir *John* to the private thoughts and imaginations of the living witneſſes, (and that without ſuggeſting any thing to ground them upon) viz. whether they believed the intention was, that the plaintiff ſhould have no wages if he went away before the year was ended; and this was ſo much harrangued upon, that the jury were ſuppoſed to be influenced and inveigled by it.

Upon this queſtion being ſtated to one of the witneſſes, I am aſſured his anſwer was, that he knew not what to ſay to it; and that the court in ſumming up the evidence, took notice of that anſwer, and ſaid, nor indeed did he know how he ſhould.

There is no conſidering man but will ſoon ſee the conſequence of introducing *belief* and *imagination* for evidence, *in oppoſition to poſitive proof*; that it muſt be very fatal and dangerous, as well to the lives as to the property of mankind, and may well be dreaded, and therefore hope will not be repeated.

If Sir *John* ſhall pleaſe, at any other time, to favour me with a true report of this caſe of *Worth* and *Viner*, or of any caſe to ſuport it, I ſhall have other opportunities of inſerting it; but ſhould I fail of that honour, I ſhall endeavour that the caſe ſhall not be loſt to the profeſſion and the publick.

As Sir John *called upon me ſo publickly to print this caſe*, I could not (in juſtice to myſelf) ſay leſs than I have done.

Many

Many gentlemen conſtrue this as an intended ſlur upon the *general abridgment*; but I ſhould rather think, that no gentleman at the bar would behave with ſo little decency to ſo many great men, who have approved and encouraged the work. And I do hereby moſt ſolemnly declare, that I do not know that ever I had done, ſaid, or wrote any thing which might any ways offend him; and for the truth thereof I appeal to the whole world."

In the year 1732 Mr. Viner was employed by one Mr. Martyn to make his will, and among other inſtructions was the following one, to make Meſſrs. Brown and Selwin his executors and reſiduary legatees, and to forgive Mr. Selwin 3000*l.* due to him on bond. Mr. Viner having a notion that as Mr. Selwin was appointed one of the executors, that the bond would be extinguiſhed and releaſed of courſe, and therefore refuſed to mention it in the will; Mr. Martyn ſoon after died, and Meſſrs. Brown and Selwin proved the will. Mr. Brown brought his bill againſt Mr. Selwin for a moiety of the ſaid 3000*l.* and intereſt. In Michaelmas term, 8 Geo. 2. the cauſe was heard before the late chancellor Talbot, who decreed Mr. Brown a moiety of the ſaid 3000*l.* and intereſt as prayed by the bill. In March 1735 the cauſe came before the lords on an appeal, and the chancellor's decree was affirmed; ſee 8 vin. abr. 198. pl. 39. Cas. Temp. Talb. 240.

☞ However miſtaken Mr. Viner might be in his notions of law and equity; he was perfectly right in thoſe of real juſtice, for he reimburſed Mr. Selwin not only his loſs, but likewiſe all his law charges.

C A S E.

A. D. together with his wife and his eldeſt daughter ſome time ſince went to the Bath, where captain O found means to perſuade the daughter to leave her father and marry him privately at his own lodgings in Bath, which was done in the preſence of one witneſs only (the miſtreſs of the houſe) by a clergyman of the church of England, without any licence, whoſe name we know not, nor where he is to be found.

Since the above marriage, we have diſcovered that the ſaid captain O had long before been reputed to be married to one miſs A. K. with whom he had cohabited as man and wife, and had two children by her, and then turned her off and left her.

Upon enquiry we find that the mother of miſs A. K. has a good character, and ſhe produced a certificate ſigned by captain O before two witneſſes, whereby he acknowledges himſelf to have been lawfully married to the ſaid young lady on the 26th of September, 1749. She likewiſe produced a deed made between the ſaid captain O and the ſaid A K. by the name of A. his wife, and one Mr. G. and executed by him and her as his wife, whereby they conveyed an eſtate of the wife's of about 800*l.* value to the ſaid Mr. G.

Captain O pretends that he was never married to the ſaid A. K. but only kept her as a miſtreſs, and that ſhe has owned that ſhe was not married to him, and offered to give him a diſcharge in full for 400*l*

The facts above ſtated being the only proofs either of the one marriage or the other, the parties are doubtful whether there be ſufficient proof of both or either of the ſaid marriages.

The ſaid captain O is willing to do any thing in his power to confirm the laſt marriage, and avoid the

the firſt, and the friends of Miſs D. are deſirous that it may be determined whether ſhe is married or not.

Q. Will the proof of captain O's cohabiting with the ſaid A. K. calling her and treating her as his wife till he had two children by her, certifying and acknowledging under his hand as aforeſaid, that he was married to her, his executing a deed, wherein ſhe joined with him as his wife, whereby he conveyed away her eſtate as her huſband, and received the conſideration money for the ſame, be ſufficient and legal evidence to eſtabliſh his marriage with her without proving an actual ſolemnization thereof?

"In a court of common law, where the queſtion of marriage is only incidental, the acts of captain O ſtated would be ſufficient to charge or affect him as the huſband of the young lady, without proving an actual regular marriage, becauſe a marriage *de facto* is all that is required."

Q. Will the ſaid captain O's cohabiting with the ſaid miſs D. acknowledging his marriage, and the teſtimony of the miſtreſs of the houſe, that ſhe was preſent and ſaw them married by a clergyman of the church of England as ſhe believes, be ſufficient and legal evidence of the ſaid captain O's marriage with the ſaid miſs D?

"This will fall under the ſame rule with the former query; and was the queſtion only againſt capt. O, he would be charged as huſband to miſs D, unleſs by way of defence a former marriage was ſet up, and then captain O's own acknowment or confeſſion, or acts could not be given in evidence, but a regular proof muſt be made of a former marriage.

Q. Is the evidence above ſtated of the two marriages ſufficient to convict the ſaid captain O of felony upon the ſtatute of bigamy?

"I think the evidence is not ſufficent, but a proper legal evidence of both marriages muſt be given, whereas that with the ſaid A. K. reſts entirely upon acts of captain O, which infer marriage, but may alſo import deceit, fraud and falſhood, which are not felonies as bigamy is."

Q. If the proof above ſtated be inſufficient to eſtabliſh the firſt marriage, would it be adviſeable to inſtitute a ſuit in *cauſa jactitationis matrimonii*, or what other method would you adviſe to be taken for annulling the firſt marriage?

"If Mr. O is in earneſt to determine this matter, I think it will be very proper to take doctor Hay's opinion upon the proper method of proceeding in the ſpiritual court, and how to introduce the ſecond marriage into the cauſe; for if it ſtood merely on the firſt marriage confirmed by ſuch ſolemn acts of captain O very ſtrong *in perſonam*, and where two children were procreated, I ſhould think the firſt marriage would be eſtabliſhed.

Q. If you are of opinion that the proof of the ſecond marriage is inſufficient, what method would you adviſe Mr. D. for the ſake of his daughter to take with captain O, for ſupplying the ſame?

"It is difficult to adviſe a parent under ſuch unhappy circumſtances, but I think a ſuit ſhould be inſtituted in ſuch manner as doctor Hay ſhall adviſe, to try whether captain O is married or not to the young lady, and miſs D. ſeparated from captain O till the queſtion is determined, and if it comes out that the captain is not married, then it is eaſy to eſtabliſh the marriage with

miſs D. by repeating the ceremony. Beſides captain O, ſurely knows the clergyman or perſon who is ſuppoſed to have married miſs D and him at Bath, who with the miſtreſs of the houſe will be able to prove the fact.

March 3, 1752. *A. Hume Campbell.*

I think it will be adviſeable for miſs D. to inſtitute a cauſe of divorce againſt captain O by reaſon of a former marriage. In this cauſe Mr. O muſt give his anſwer upon oath as to both marriages. If he denies the firſt, miſs D. muſt plead the facts ſtated in ſupport of the former marriage, and cite the ſaid A. K. to ſee proceedings, by which means all parties will be before the court, and equally bound by the ſentence which muſt either affirm the firſt marriage and ſo free miſs D, or ſet aſide the former and ſo eſtabliſh her marriage.

GEO. HAY,
(one of the preſent lords of the Admiralty.)
Doctors Commons, March 14, 1752.

A Deſcription of the Abbe de la Caille's MOVEABLE ASTRONOMICAL QUADRANT; *which he made uſe of from the Year* 1743, *till his return from the* Cape of Good Hope *in the Year* 1754.

THE radius of this inſtrument is about three *Paris* feet, the carcaſe of it conſiſts of plates of a requiſite thickneſs, fortified with rulers fixed to them perpendicularly behind, by ſkrews.

The teleſcope A B is fixed in a poſition, parallel to that radius of the quadrant which terminates the diviſions on the limb at 90 degrees. It was at firſt 5 feet in length the better to diſtinguiſh the aſcending motions of the ſtars in obſerving their correſponding altitudes, thereby to obtain the moments of their culminating in order to get their differences of right aſcenſion, a method which though it be indeed very tedious, he judged to be far more accurate, than the way of doing it by obſerving their tranſits over the meridian.

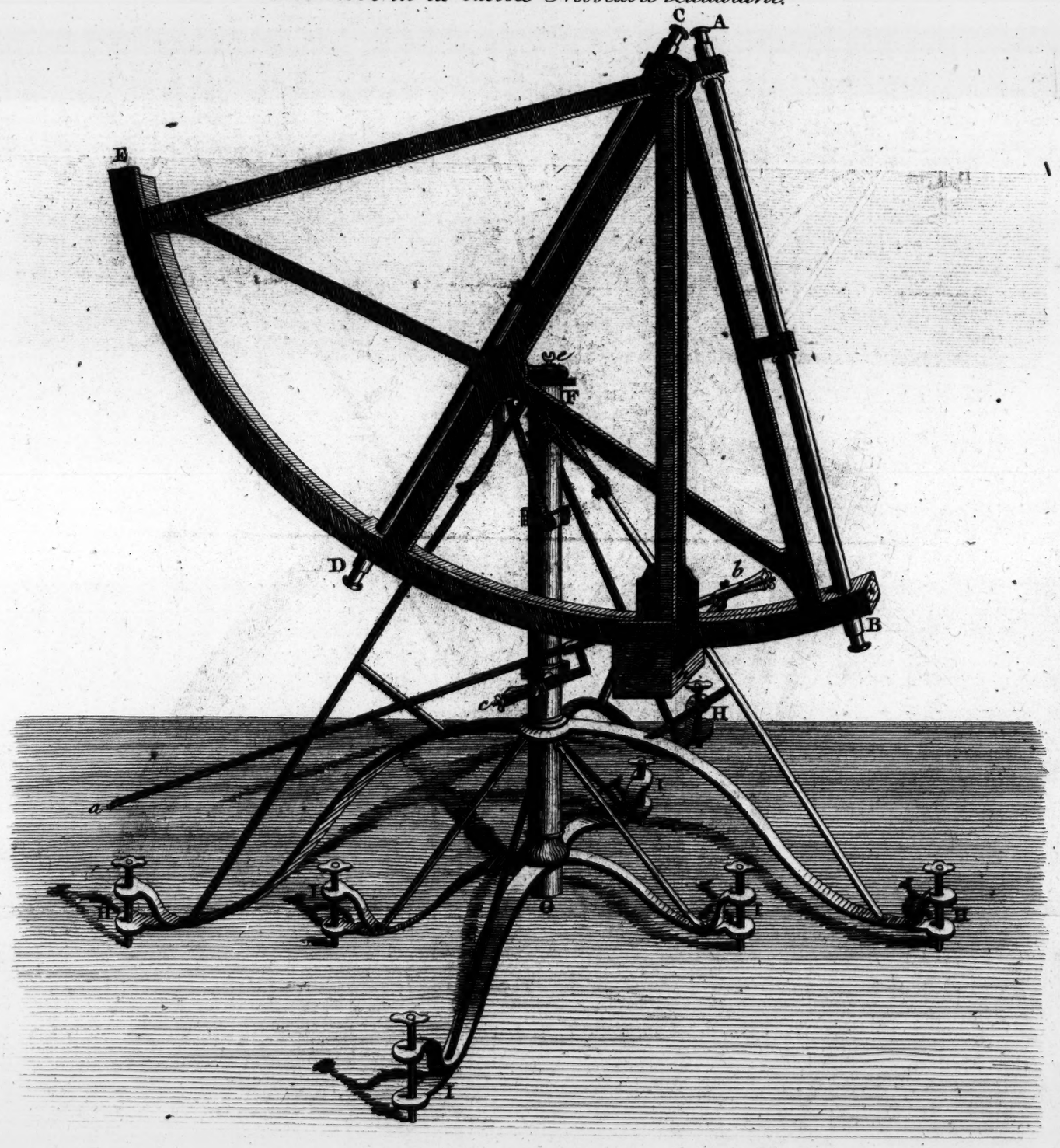
When M. *de la Caille* was preparing for his voyage to the *Cape* in 1751, he reduced this teleſcope to three feet and a half in length, the ſtars riſing and falling quicker there than in the parallel of *Paris*; beſides, the commodiouſneſs of carriage was another inducement.

To the centre-pin of the quadrant is appended a weight, by a fine ſilver wire, about the four hundredth part of an inch in diameter; which wire is defended from the wind by being incloſed in a pendulous groove *f o*, the weight hanging in a little trough of water *h*, by which its vibrations are ſoon reduced to reſt. The wire, thus ſtretched by the weight, is brought to the proper point among the diviſions on the limb of the inſtrument, by the means of a microſcope *g*, a ſmall lamp, and the ſkrews *c b*, which give motion to the rod *a c* whereby the whole body of the inſtrument is governed, and its poſition ſettled.

In the common focus of the lenſes of the teleſcope is a micrometer furniſhed with fine ſtretched ſilver wires. Its chief uſe was in the obſervations of correſponding altitudes; for by bringing, by the help of the ſkrew, the moveable wire to a proper diſtance from the fixed horizontal one, two appulſes of the ſame ſtar could be obſerved, one to the fixed wire, which was always the uppermoſt, and the other to the moveable one under it.

As to the line of collimation, or that paſſing through the centre of the object-glaſs and the croſſing of the

The Abbé de la Caille's Moveable Quadrant.



For the General Magazine.

the fixed wires in the focus; the quantity of the deviation of it from a parallelism with the radius was examined by several trials in December 1743, in January 1745, and in December 1748. When by a great many meridian altitudes of the bright ſtar in the ſide of *Perſeus*, taken by converſion of the inſtrument, on either ſide of the terminating point of the quadrantal arch, and all reduced to the epoch of a certain day, it was found that the quadrant gave all altitudes 19 ſeconds too great.

The third of January, 1749, he put new ſilver wires into the micrometer, which required new obſervations for aſcertaining the poſition of the line of collimation; and by meridian obſervations of the ſame ſtar in *Perſeus*, it then appeared that the inſtrument ſhewed the altitudes eight ſeconds too great, which it continued to do till the 10th of September 1750, when it was packed up for the *Cape*.

At the *Cape* the 6th of May, 1751, he diminiſhed the length of the teleſcope, and inveſtigated the poſition of the line of collimation by means of an horizontal object at a great diſtance; when he found that 51 ſeconds were to be ſubducted from all altitudes.

December the third, 1751, he placed the edges of a very fine plate of braſs parallel to the horizontal wire of the micrometer, for the more eaſily obtaining correſponding altitudes of very minute ſtars, in order to complete his catalogue of the ſouthern ſtars, by their inſtantaneous vaniſhing at one of the edges of the plate, and re-appearing at the other, without need of illuminating. From this time the inſtrument ſhewed altitudes half a minute too great till Auguſt 1752, when he made ſeveral alterations therein, beſides the addition of a moveable Teleſcope C D, to adapt it to his intended geodetical operations, for taking angles of poſition, in order to aſcertain the juſt quantity of a degree on the meridian in that part of the globe.

The whole quadrant A C E D B was mounted, by means of a cylindrical pin *e* perpendicular to its plane, on a ſtrong upright cylinder F G ſupported below by the feet H, H, H, I, I, I, I, all fortified with braces, and contrived to be raiſed or lowered occaſionally by ſkrews, as repreſented in the figure.

The quantity of the quadrantal arc of this inſtrument was examined by placing it in an horizontal poſition and taking angles all round the horizon, between objects nearly in an horizontal plane, the ſum of which ought to be preciſely 360 degrees. On many ſuch trials it was conſtantly found, that the real amount of them was no more than 359° 59′ 30″.

Inquiries and Conjectures concerning an Emerald, by means of which the Emperor Nero *viewed the Combats of the Gladiators.*

MANY authors have ſpoken of a famous Mirour of Emerald belonging to the Emperor *Nero*, with which he uſed to ſee the Gladiators fight; and I do not remember that any writer has queſtioned the truth of the fact. However I muſt obſerve, that *Pliny*, whom I ſuppoſe the firſt author that has mentioned the thing, and from whom probably almoſt all who came after him, took it; ſays no more, than that *Nero* ſaw thoſe combats by the help of an Emerald, without ſaying any thing of a mirour: *Nero Princeps Gladiato-*

rum pugnas ſpectabat ſmaragdo. lib. 37. c. 5.

It remains then to know what advantage *Nero* could derive from the Emerald he uſed on theſe occaſions. Did he ſee the objects magnified? Did they appear nearer to him than they really were? Did he ſee them more diſtinctly? Or view them better than with his bare eyes? Was the help which this Tyrant procured from his Emerald the effect of ſome property peculiar to the nature of the Emerald? or was it owing to the art with which it was wrought? Was it really a Mirour? And, ſuppoſing that it was ſuch, was it a plane, a concave or a convex mirour; Or was it wrought in the ſhape of a concave, or a convex lens, after the manner of our modern ſpectacles?

In the firſt place it is manifeſt that the Emerald contributed to this effect by its tranſparency and its poliſh; and poſſibly its beautiful green colour might have ſome ſhare in it. But this is not ſufficient, and it muſt be from its figure that it principally acquired its virtue. We have no poſitive teſtimony whereby to aſcertain this figure; and it is to conjectures only that we can have recourſe. I meet with ſome plauſible and very probable ones in *Pliny*.

That *Nero* was a myope is plain from this paſſage of *Pliny*: *Neroni, niſi cum conniveret ad propè admota, hebetes* (oculi) lib. 11. c. 37. Whence I conclude, in the firſt place, that this Emerald of his, was neither a concave reflecting mirour, nor a convex lens: For neither concave mirours, nor convex lenſes are ordinarily uſed to remedy the defect of viſion in myopes. And though it is poſſible, and even practicable for myopes to ſee objects clearly and diſtinctly, by making uſe of a concave mirour or a convex lens; yet it muſt be acknowledged that this expedient is not the eaſieſt to put in practice; beſides which the objects will by this means appear inverted.

Hence it follows, that as there is nothing in hiſtory to prove, directly or indirectly that the Emerald was either a concave mirour, or a convex lens: and it being beſides very improbable it ſhould be known in *Nero*'s days, that concave mirours or convex lenſes could help ſhort-ſight; it would be carrying the conjecture beyond all probability to ſuppoſe that this Emerald was either the one or the other.

It is alſo poſſible that the Emerald might be a convex mirour; for ſuch mirours are very well adapted to relieve the ſight of myopes. But I abandon this conjecture as too weak, having nothing poſitive to ſupport it.

I am of opinion that *Nero*'s Emerald was a plane, or a concave lens, either of which conjectures ſeems probable. For in the firſt place it is certain that there were in thoſe times plane emeralds which repreſented objects in the ſame manner as plane mirours, as *Pliny* aſſures us. *Quorum verò corpus extenſum eſt, eâdem, quâ ſpecula ratione, ſupini imagines rerum reddunt.* Lib. 37. c. 5. and that there were alſo concave ones to help the viſion: *Iidem plerumque et concavi ut viſum colligant.*

Whence it follows that it is a conjecture ſupported by proof, as far as a bare conjecture can be, that the Emerald which *Nero* made uſe of, was concave, and ſimilar to the concave lenſes of glaſs, now in uſe, which every one knows are proper for aſſiſting the ſight of myopes.

It remains now to prove, that it is almoſt as probable that this emerald was plane. In order to which it ſhould be obſerved that there are ſome myopes who have two ſorts of impediments to their diſcerning objects.

jects. The firſt, common to all myopes, is that the rays coming from the object and entering the eye, do unite in a point before they come to the *retina*; and this is the reaſon why a myope muſt bring an object very near his eye to ſee it diſtinctly.

The ſecond defect, obſervable in a great many myopes, is that their organ of viſion is very delicate, and extremely ſenſible of the impreſſions of light, ſo that a great light dazzles them and hinders them from ſeeing; and that a very feeble light is ſufficient for them to diſtinguiſh objects by, if at a proper diſtance from their eyes. We frequently obſerve that ſome of theſe myopes can read with eaſe in dark places where a man of a good ſight cannot diſtinguiſh a letter.

This being the caſe, it is evident that all thoſe who have this defect, of their viſion being hurt by too much light, may find a remedy by diminiſhing the quantity that would otherwiſe enter their eyes, and without any other help ſee a great deal better, than with the whole light that illuminates the object.

Whence it is that many who have this defect and weakneſs of the eyes, inſtead of ſpectacles, have recourſe to two thin plates of lead, or any other opaque ſubſtance with very ſmall holes in the middle, which correſpond to their pupils, and ſo read without pain, and ſee diſtinctly what otherwiſe it would be impoſſible for them to do.

This is ſo natural a practice, that it is in common uſe in the *Eſquimaux* country, a ſavage people of *North America*, as Mr. *Ellis* informs us in his Voyage to *Hudſon's Bay*; where ſpeaking of theſe *Indians*, he ſays, "Their ſnow-eyes (as he very properly calls them) are a mark of "their ſagacity. They are ſmall "pieces of wood or ivory, ſhaped "to cover their organs of ſight, "and fixed on by a knot tied behind the head: in each there is a "chink of the length of the eye, "but very narrow, and through theſe "they ſee very diſtinctly, and without the leaſt inconvenience.

"This contrivance ſecures them "againſt blindneſs from the ſnow, "a very dangerous and painful "diſeaſe ariſing from the action of "light too ſtrongly reflected on the "eyes, eſpecially in the ſpring, "when the ſun is pretty high. The "uſe of theſe eyes conſiderably "ſtrengthens the ſight, and the "*Eſquimaux* are ſo accuſtomed to "them, that when they would view "very remote objects they always "put them on."

The emperor *Nero* was one of this ſort of myopes, to whom too much light is an impediment to diſtinct viſion; for he could not well diſtinguiſh even near objects, but by contracting his eye-lids, as *Pliny* ſays in the above cited paſſage. It is therefore manifeſt, that by hindering too much light from entering his eyes, *Nero* removed one of the principal obſtacles to his ſeeing diſtinctly.

But in viewing an object by reflection from a plane Emerald, he ſaw it with a very feeble light. For it is evident that the quantity of rays reflected by the plane ſurface of an Emerald muſt be very ſmall in compariſon of the light coming directly from an object. He could therefore ſee it much better, than by looking directly at it. And notwithſtanding that thoſe of a ſtrong ſight would have experienced an obſtacle in the uſe of the plane emerald, yet *Nero* might, by the help of it, ſee, perhaps, as well as others whoſe ſight was far better than his.

Hence I conclude, that it is probable the famous mirour, mentioned by hiſtorians, that *Nero* uſed to

view

view the Gladiators with, was no other than a plane emerald: *Iſidore* in his Etymologies, *lib.* 16. *c.* 7. is of the ſame opinion, where ſpeaking of Emeralds, he ſays: *Cujus corpus, ſi extenſum fuerit, ſicut ſpeculum, ita imagines redit: Quippe Nero Cæſar gladiatorum pugnas Smaragdo ſpectabat.*

An Account of a remarkable and ſudden Decreaſe of the River Eden *in* Cumberland, *by* William Milbourne, *Eſq*;

IN the night between the twenty-eighth and twenty-ninth of December, 1762, the River *Eden*, at *Armathwaite*, fell at leaſt two feet perpendicular. The Decreaſe of the waters was ſo ſudden, that ſeveral trouts and young lampreys had not time to ſave themſelves, but were found the next morning frozen to death. Of the former, eye-witneſſes can ſpeak to fifteen, of the latter, two hundred, all which were found on the extent of no more than forty yards; and ſeveral dozen of young lampreys were eaſily taken up alive, by the hand on the ſhallows. The ſuddenneſs of the water's decreaſe may be ſo far aſcertained, as follows. The miller of *Armathwaite-mill* left off grinding at twelve o'clock at night, there being then ſufficient water to work the mill. He went to the mill the next morning at ſix, and there was not then water enough to turn the wheel round. It hath not been known, that the *Eden* was ever ſo low at this place, by a foot, in the dryeſt ſummer. The water continued in this ſtate, till about eleven o'clock in the morning of the 29th, and then gradually increaſed (no rain or ſnow falling) till about one in the afternoon, by which time it had riſen about a foot perpendicular.

The trouts in general were ſmall, the lampreys about ten inches or a foot long.

There was a moſt intenſe froſt that night, and a ſtrong wind varying from the north-eaſt to the ſouth-eaſt; and the river runs here from ſouth-weſt to north-eaſt. *See page* 107, &c.

On the yellowiſh Waſp of Pennſylvania, *by Mr.* John Bartram.

I Saw ſeveral of theſe waſps flying about a heap of ſandy loam: they ſettled on it, and very nimbly ſcratched away the ſand with their fore feet, to find their neſts, whilſt they held a large fly under their wings with one of their other feet: they crept into the hole that led to the neſt, and ſtayed there about three minutes, when they came out. With their hind feet they threw the ſand ſo dexterouſly over the hole, as not to be diſcovered: then taking flight, ſoon entered again with more flies, ſettled down, uncovered the hole, and entered in with their prey.

This extraordinary operation raiſed my curioſity to try to find out the entrance; but the ſand fell in ſo faſt that I was prevented, until by repeated eſſays I was ſo lucky as to find one. It was ſix inches in the ground, and at the farther end lay a large magot, near an inch long, thick as a ſmall gooſe-quill, with ſeveral flies near it, and the remains of many more. Theſe flies are provided for the magot to feed on, before it changes into the nymph ſtate: then it eats no more, until it attains to a perfect waſp.

The order of providence is very remarkable, in preſcribing the different

ferent ways and means for this tribe of inſects to perpetuate their ſeveral ſpecies, no doubt for good ends and purpoſes, with which we may not be well acquainted, but moſt likely, for the prey and food of other animals.

One kind of waſp fabricates an oblong neſt of a paper-like compoſition, full of cells, for the harbour of its young, and hangs it on the branch of a tree.

Some build neſts of clay, and feed their young with ſpiders; others ſuſtain them with large green graſshoppers: then there are others that build combs on the ground (like ours in *England*) to nouriſh a numerous brood.

But this yellowiſh waſp takes a different method, with great pains digging a hole in the ground, lays its egg, which ſoon turns to a magot; then catches flies to ſupport it, until it comes to maturity.

The wiſdom of providence is admirable, by giving annually a check to this prolific brood of noxious inſects, in permitting all the males to die, which are the moſt numerous of the family; only reſerving a few impregnated females of each ſpecies, to continue their race another year: whereas bees, whoſe labours are ſo beneficial to mankind, always ſurvive the winter, to raiſe new colonies.

Obſervations upon the effects of electricity applied to a Tetanus, *or* Muſcular Rigidity, *of four months continuance.* *By* WILLIAM WATSON, *M. D. F. R. S. &c.*

CATHERINE FIELD, a girl in the Foundling Hoſpital, aged about ſeven years, and otherwiſe a healthy child, having been diſordered a few days with complaints ſuppoſed from worms, was obſerved, on Thurſday, July 8, 1762, to open her mouth with great difficulty. This increaſed ſo much, that by the Sunday following, her teeth were ſo much confined, it was with difficulty that even liquids could be admitted into her mouth. She had two days before parted with two worms, and had ſeveral very offenſive ſtools. Her breath was now, and had been for ſome days, very fetid.

Though her jaw was locked very cloſe, ſhe was without pain; even in the Temporal and Maſſeter muſcles, which, in this inſtance, were tenſe, hard, and ſpaſmodically affected. She was feveriſh, her pulſe was quick, and her fleſh hot; and ſhe had had but very little ſleep.

On Monday, July 12, I viſited her in conſultation with Dr. Morton. We found ſhe had had a reſtleſs night; her fever was high, and it was infinitely difficult to introduce any thing between her teeth. As there had been no wound, no eruption repelled, we were of opinion, from her offenſive breath and other indications, that the ſpaſm of her jaw was ſymptomatic, either of worms or foul bowels.

Whatever was admitted into her mouth was ſwallowed without difficulty; neither in this ſtate of the diſeaſe was her breathing at all affected. The regimen we put her under will be mentioned hereafter.

For near three weeks the diſorder confined itſelf to the jaw, during which time ſhe was conſtantly feveriſh. At times indeed her fever ran very high, and her pulſe beat 130 ſtrokes in a minute. At others only 100; but never for theſe three weeks ſlower.

Not-

Notwithſtanding our endeavours, the diſeaſe continued, and the rigidity communicated itſelf to the muſcles of her neck, ſo that ſhe could not move her head in the leaſt: and from pains ſhooting down her back, we apprehended, and which indeed did ſoon after happen, that the muſcles of her back would likewiſe be rigid.

After the back was affected, the diſeaſe extended itſelf very faſt; ſo that by the end of September, almoſt all the muſcles of her body were rigid and motionleſs. The rigidity from the Temporal and Maſſeter muſcles had extended itſelf to the cheeks, to the neck, breaſt, abdominal muſcles, all thoſe of the back, the right arm, the hips, thighs, legs, and feet. Nor were they, by any force, that could be exerted with ſafety, to be extended. By the rigidity and contraction of the large and long muſcles of the back, the Os Sacrum and hips were pulled towards the ſhoulders; ſo that the ſpine formed a very conſiderable arch. By the ſuperior ſtrength of the Flexor muſcles of the thighs to that of the Extenſors, the legs were pulled up almoſt to the thighs.

Of all her limbs, the left arm only preſerved ſome motion. Of this the joint of the ſhoulder was rigid, that of the elbow extremely impaired; but the wriſt, hand, and fingers, were reaſonably pliant. The various muſcles ſubſervient to the motions of the eyes, eyelids, lips, and tongue, as well as thoſe, internal ones at leaſt, which aſſiſt in performing the offices of reſpiration and deglutition, did not ſeem in the leaſt to partake of the rigidity.

From the end of September to the middle of November, the diſeaſe was at a ſtand. The feveriſh heat had left her, and her pulſe beat generally between eighty and ninety ſtrokes in a minute. But during this interval ſhe was ſeized many times, both in the night and in the day, with violent convulſions in thoſe muſcles of the eyes, face, and right arm, which had any mobility left. Theſe were ſo ſevere, that in her weak and wretched ſtate, her attendants imagined every attack would put an end to her diſtreſſes.

In this ſtate, partly from the ſeverity of the diſeaſe and partly from the very ſmall quantity of food which could be given to her, and which was only through a ſmall opening made by extracting two of her teeth, and without which ſhe muſt inevitably have been ſtarved, ſhe was emaciated in a moſt extraordinary manner. Her belly was contracted, and pulled inwards towards the ſpine. Her whole body, to the touch, felt hard and dry, and much more like that of a dead animal than a living one. This, added to the very great diſtortion of her back and lower limbs, heightened the diſagreeable ſpectacle.

During the continuance of this diſorder, which had laſted now more than four months, nothing had been omitted that we could ſuggeſt. Vermifuges of the moſt celebrated kind, linſeed oil, both by the mouth and by clyſters, and ſuch other medicines as tend both to carry off or deſtroy worms, and cleanſe the bowels, were aſſidiouſly adminiſtered. But no relief ariſing from theſe, bleeding with leeches at the temples, when her fever ran high, bliſters behind the ears, round the neck, upon the head, and in various parts of her body, were from time to time applied, as the diſorder ſeemed to indicate. Nor during this time were antiſpaſmodic remedies of various kinds omitted, and that in very liberal doſes. Among theſe, as in ſeveral caſes of locked jaws, related by authors of undoubted credit,

credit, opiates had been found to have been attended with great ſucceſs, *Tinctura Thebaica* was copiouſly given. So that, between the 12th of July and the end of the month, more than nine hundred drops of that tincture were taken.

Though this medicine, given in large doſes, did not affect her head, but only gave her quiet nights, yet it was occaſionally obliged to be ſuſpended; as her pulſe was at times much ſunk, and her ſweats cold and clammy. Volatile liniments were liberally uſed to the rigid parts, and warm bathing was continued for many weeks, with much friction, while in the warm water.

After warm bathing had been ſo long tried without ſenſibly good effect, cold bathing was directed; and ſhe was dipped ſeveral times, without being apparently the better or worſe for it.

From the end of September, as what had been done hitherto had not been able to prevent the rigidity extending itſelf, we deſiſted from attempting to relieve her by medicine, and determined to nouriſh and ſupport her; and wait to obſerve, though it was ſcarce to be expected, whether nature unaſſiſted would point out any criſis for her relief. This attention was continued to the middle of November, without any other alteration than that her convulſions encreaſed in their force; and every day, by thoſe who were about her, was expected to be the laſt.

I had heretofore many times obſerved, that in paralytic limbs, the muſcles of which had for a conſiderable time ceaſed to be ſubſervient to the will of the patient, I had been able, by the means of electricity, to make any muſcle I thought proper contract itſelf, and act as a muſcle, without the patient's being able to controul it. I had ſeen in one inſtance the good effects of electricity, in reſtoring to the hands and arms of a paralytic almoſt their accuſtomed ſtrength, and voluntary motion; but theſe good effects, the greateſt part of them at leaſt, were only temporary, and the patient relapſed. But I had never ſeen or known the effects of electricity in the contrary affection, viz. rigidity of muſcles. I was very deſirous therefore of trying its effects in this inſtance, and of ſhaking the rigid muſcles by electricity; eſpecially as I could have it done with very little pain, and no danger to the patient.

It is now ſeventeen years ſince, I diſcovered, that by means of the *electric circuit* I could cauſe the electricity to pervade any muſcle, any number of muſcles, or whatever part of the body I pleaſed, without affecting the reſt with that unpleaſing ſenſation.

But to return to our patient: we ordered her to be electriſed about the middle of November. This was done every day, or every other day for about twenty minutes, by *ſimply electriſing* the muſcles ſubſervient to the motion of the lower jaw, her neck, and her arms. This at firſt was very difficult to be atchieved; as ſhe was not capable of being placed in a chair to be electriſed by herſelf, and as an aſſiſtant could ſcarce hold her on account of her being greatly diſtorted. It with difficulty, however, was done.

After about a fortnight, the convulſions left her, and her ſleeps were longer and more quiet; but the rigidity continued the ſame. After this, ſuch parts of her body, as were thought expedient, were made part of the *electric circuit*, and were ſhook by the exploſion of the *charged vial*. Theſe applications were at firſt more particularly made to the temporal and maſſeter muſcles

cles (the parts firſt affected) and to the muſcles of the neck and arms; afterwards to thoſe of her back, hips, thighs, and legs. Care was taken to moderate the ſhocks in a manner, not to be too ſevere; and ſhe was electriſed every ſecond, and ſometimes every third day.

The fits, as I juſt now mentioned, and which were of the epileptic kind, left her in about a fortnight from her being electriſed, and have never ſince returned, even in the ſlighteſt degree. In about a fortnight more her jaw was looſer, and the muſcles of her neck and arms had a large ſhare of motion: and it was very obſervable, that as her muſcles increaſed in their power of motion, they increaſed in their ſize, and the patient in her ſtrength. By the end of January, by continuing the electricity, every muſcle in her body was looſe, and ſubſervient to her will; and ſhe could not only ſtand upright, but walk, and can even run like other children of her age. With her ſtrength, ſhe has ſo far recovered her fleſh and colour, that her preſent appearance is that of a reaſonably healthy child; and her breath has quite loſt its late offenſive ſmell. The only parts of her body not quite ſo looſe as the reſt, are the temporal and maſſeter muſcles, which were the parts firſt affected by the diſeaſe. This prevents her opening her mouth quite ſo wide as ſhe formerly could; but this hindrance is ſo little as not at preſent to be taken notice of, unleſs hinted at beforehand. She now goes to ſchool, lives at large, and goes out every day when the weather is ſeaſonable; but the electriſing is ſtill continued, though not ſo conſtantly and regularly as before. This I propoſe ſhould be continued, until the return of warm weather. In the laſt week this child was preſented to the committee of the Foundling Hoſpital, where ſeveral of the governors, who were appriſed of her caſe, expreſſed their amazement at her, ſo unexpected, recovery.

In the caſe before us; when an unuſual diſeaſe of ſeveral months continuance, and when the patient was ſuppoſed to be reduced to the laſt extremity; when medicines and applications of every kind, celebrated by the ableſt writers and practitioners both ancient and modern, had been tried with little or no effect, at leaſt with regard to the rigidity; when during a courſe of electriſing no medicines or applications of any kind were made uſe of; when likewiſe, during this courſe, the patient voided no worms, had no purgings, eruptions on the ſkin, or kindly impoſtumations, which might have been conſidered as critical diſcharges, and to have brought about the cure; when, I ſay, none of theſe things happened, and the patient under electriſing only, and that at a very ſevere ſeaſon of the year, has been reſtored to perfect health, I cannot refuſe my aſſent in believing it effected by the power of electricity. That ſo active a principle, when properly directed to the diſeaſed parts, ſhould have important effects, no one can doubt who has been in the leaſt converſant with it. Though at the ſame time I confeſs, well appriſed of the ſalutary effects of warm weather in reſtoring a more perfect motion to torpid limbs, that had the electriſing been begun in March, and continued to the end of May, tho' attended with the ſame ſucceſs as in the preſent inſtance, I could not have ſuppreſſed my doubts of the warm weather greatly contributing thereto. But as this was done during the depth of winter, and that a ſeverely cold one, no ſcruples, in my mind at leaſt, can ariſe upon this head.

Hints

Hints and Obſervations for the Improvement of Agriculture.
Continued from Page 394.

Reaſons, conſiſtent with ſound Policy, why the Growth of Hemp ſhould be encouraged in Ireland *rather than in* England, *or* America; *in a Letter to the Editors of the* Muſeum Ruſticum.

GENTLEMEN,

THE importance of this nation's not continuing in a dependent and precarious ſituation to foreigners for the ſupply of hemp, has engaged the attention of the legiſlature encouraging the growth of it in America, by offering conſiderable bounties on the importation of it from thence: but, conſidering the high price of labour there, it has been matter of doubt with ſome people, whether thoſe bounties will be effectual for that purpoſe, or, on the whole conſidered, even if they ſhould, whether that would be proper, if the ſame effect could, in another manner, be produced.

People will certainly employ themſelves in ſuch culture and occupations as will be moſt profitable. If the raiſing of hemp there be not ſo, to have it done muſt be by bounties, &c. that the difference in profit may be ſupplied to the perſons who raiſe it; and then to them it will be equal how they are employed, if ſo much money ariſes to them on the foot of the account.

But this is not ſo in a national light; for if their occupation in this way produces but half ſo much as it would have done in another, that difference is a national loſs: and as to the encouragement by bounties, that muſt ariſe out of the fund of taxes, and for ſo much is a diminution of the revenue, which, by other taxes, muſt be ſupplied.

The ſociety of arts, &c. has encouraged the produce of it in England by domeſtic bounties, to which alſo ſome objections have been ſuggeſted, as by this means great quantities of land would be diverted from raiſing of corn; and if the corn-land now produces more national profit, the difference would be ſo much real loſs; and by the encreaſed number of hands which this may require, other manufactures might be effected, and diminiſhed in the ſome proportion as this is encreaſed.

But I imagine that the nation may be effectually ſupplied, free from the inconveniences here ſuggeſted.

There are immenſe quantities of freſh rich land in Ireland, proper for this purpoſe: the labour there bears no ſort of proportion to that in America or England: a ſmall bounty would be a ſufficient encouragement, which need only be temporary, as, when this culture is once eſtabliſhed there, the profit would of itſelf be a ſufficient and ſubſiſting inducement; and I doubt not but it would have the co-operation and aſſiſtance of the ſocieties eſtabliſhed there.

This would give employment to numbers of their inhabitants, who at preſent have ſcarce any; would occaſion the breaking-up great quantities of land now under ſheep-paſture; the number of ſheep would thereby be diminiſhed, and, in conſequence, the price of wool raiſed, and the French prevented from having ſo much for their manufactures, which muſt therefore encreaſe in price, and leſſen in quantity.

On the whole, it is ſubmitted to conſideration, whether Ireland be not, in every point of view, the

moſt proper place for this purpoſe, by,

GENTLEMEN,

Oxford, Yours,
July 3, 1764. P. E.

Method of weeding Wheat by means of a Flock of Sheep.

A few years ago, a farmer in Warwickſhire ſowed a field, containing five acres, with wheat. The ſoil was a good loam, but rather light than ſtiff, and inclined to be ſtoney. The wheat plants looked healthy during the whole winter, and promiſed fair to yield a plentiful crop; but in the ſpring, warm rains coming on brought ſuch ſtore of weeds, that the wheat was in danger of being choaked.

He was for ſome time puzzled what to do; it being the latter end of May, and the wheat being on the ſpindle, and ſome even in the ear, to weed it with hooks would have been endleſs, not to mention the damage that would have been done to the plants by the weeders feet.

In looking over the field, he found no great deficiency of wheat plants; but they were in moſt places ſo over-topped by the weeds, as to be ſcarcely viſible, and in the furrows, in particular, not a blade of wheat was to be ſeen.

His method of poughing for wheat-ſeed in this land is, to make narrow ſtitches, but wider than a ridge, and more rounding, being not ſo ſharp on the back.

Whilſt he was meditating what to do in this matter, he ſaw a gap by ſome accident made in the hedge, and a parcel of his ſheep got into the wheat field: and as he apprehended great damage, ordered them to be immediately driven out, and the gap mended.

But on taking a ſurvey, he was not a little ſurpriſed to find that the ſheep, inſtead of doing any damage to the wheat, had done it a great deal of good, for they had eat up almoſt every weed which grew in that part of the field next to the paſture.

Encouraged by this accidental diſcovery of a propenſity in ſheep to eat weeds rather than wheat, he turned a hundred into the field, two or three hours in the morning and the evening, for ſeveral days together, till all the weeds were nearly conſumed.

On inſpecting his field afterwards, he found the ſheep had done very inconſiderable damage to the wheat, but the weeds were eat down ſo cloſe that they could never again get a-head; the wheat going on proſperouſly, and yielding at harveſt a plentiful crop of clean, good corn, which was more than any of his neighbours could that year boaſt of.

Whilſt the ſheep were eating the weeds, he found they moſtly walked in the furrows, as being eaſier to their tread than the ſloping ſides of the narrow ſtitches; and this might be one reaſon of their doing the wheat ſo little damage by their treading.

However in this new method of huſbandry he took a precaution, which greatly contributed to his ſucceſs: that is, he never let them lie in the fields at night, as the weight of their bodies when they lay down to ſleep could not have failed doing great damage to the plants.

The

The true method of extracting the virtue of Hops in Brewing: In a letter from a hop merchant.

SIR,

AS I deal pretty largely in the hop trade, I beg leave to communicate, through the channel of your uſeful book, an injurious charge that is often brought againſt me by moſt of my cuſtomers, and which, I doubt not, is as frequently the caſe with others in the ſame way of trade; for though I always give the beſt price, and am a ſufficient judge which are the beſt goods, yet when I have retailed them out to my cuſtomers, ſeldom a week paſſes but ſome of them complain of the exceſſive ſweetneſs of their ale, and the intolerable bitterneſs of their ſmall beer.

Our 'ſquire the other day ſwore his ale was like honey, and his ſmall beer like ſoot; and became in ſuch a paſſion with me, that all I could ſay to *his honour* could not appeaſe him.

I deſired leave to examine his butler in what manner he brewed: to this he conſented, but at the ſame time ſaid he would be bound to be hanged if any man in England knew how to brew good beer better than Humphrey; notwithſtanding which, *Humphrey*, not the hops, was the cauſe why I had his *honour*'s anger: and as I durſt not tell him Humphrey's ignorance, I am in hopes he will find it out when he ſees the cauſe truly ſtated; for not only Humphrey, but Tom, Dick, and Harry, are all guilty of Humphrey's fault.

When they have made their ſtrong beer, or ale wort, they put in the hops in the ſame manner that they receive them from my ſhop: the conſequence is, that the richer and better the wort is, the leſs it will partake of the eſſence of the hop. The rich fat wort ſheathes up the pores of the hop, and, as it were, embalms the leaves, ſo that the beer, or ale wort, can extract ſcarcely any part of the neceſſary quality of the hop: but when it is put into the ſmall beer wort, a fluid of a more thin nature, then the pores are unſheathed, and the ſmall beer is rendered as bitter *as ſoot*, while the ale is as ſweet as *honey*. Now, if Humphrey, Tom, Dick, and Harry, will previouſly ſoak the hops in a pail or two of hot water, the hop will adminiſter its good qualities impartially, and preſerve the 'ſquire's beer to a proper age, and me from the imputation of being an unfair dealer.

To confirm the truth of my obſervation, take a quarter of an ounce of the beſt green tea, and inſtead of pouring on it ſimple boiling water, let the water have the ſame quantity of ſugar boiled in it that would be neceſſary to ſweeten ſo much tea when made, and you will find that the ſweetneſs of the water will prevent its extracting the grateful bitter flavour of the tea. In ſhort, the reaſon is ſo obvious, that I am perſuaded Humphrey will ſoak his hops, and make an allowance for the additional water ſo uſed in his firſt account; and that this method will produce the 'ſquire good beer, and me, and every hop-merchant that is honeſt, a good name.

A method of rendering putrid water ſweet.

HERE is a very eaſy means, whereby every cottager has it in his power conſtantly to uſe ſweet and wholeſome water.

It

It is no more than mixing with the water a quantity of common clay, ſufficient to take off its tranſparency, ſo far as that the hand held juſt under the ſurface ſhall not appear through it.

It is of no great conſequence to the farmer or labourer, by what quality in the clay this ſalutary change is effected, if they enjoy the benefit ariſing from it.

On the inſects which deſtroy firs and pines, and a newly-diſcovered inſect which infeſts many ſorts of trees: In a letter from a gentleman at Nottingham.

I Remember to have read ſome account about the fir trees being deſtroyed near the ſea by an inſect; and I will now give you a few obſervations that I have made on that head.

The firſt was in June, about ſix years ago, when being in London on ſome buſineſs, I frequently went to walk in thoſe delightful nurſeries about town.

I perceived vaſt quantities of the young ſhoots of the Weymouth pines broke, and hanging downwards, and on examining them, I perceived that ſomething had eat out the pith of the ſaid ſhoots that were broke; upon which I concluded, that it muſt be ſome inſect which had been the occaſion of it; and that this was the reaſon why the firs and pines about London loſt their leaders, and became buſhy and ſtinted, although, till then, I, like moſt others, had attributed it to the ſmoke, or ſulphur, that came from the town.

Upon this I was determined to uſe ſome pains to diſcover what the inſect was; and a favourable opportunity ſoon offered itſelf, for a neighbouring gentleman having purchaſed a parcel of firs out of Oxfordſhire, from a nurſery which was full of theſe inſects, they ſoon began to ſpread themſelves in his plantations, ſo that I was called in to know what was the matter with the trees, and upon inſpecting them carefully I ſoon diſcovered that it was a brown grub, about four tenths of an inch long, that eat out the pith.

I took home many of them, to ſee what they would come to; but they all died.

However, this ſpring I found that they came to a browniſh moth, much like that which produces the grub that blights the apples and pears, but leſs, and under the wings they are much darker.

Theſe depoſit their eggs in the heads of the pines or firs, and in the beginning of May are to be found in a ſmall whitiſh web, out of which they come a brown grub, which eats its way into the leading ſhoots, and ſometimes goes upwards, eating out the pith as it goes; at other times, downwards.

It continues this till about June, when it becomes a cryſalis, and lies in a dormant ſtate till about Midſummer, when it comes out a moth; at leaſt thoſe did ſo which I made this diſcovery from.

In any plantation where theſe horrid inſects are, you will ſee in June ſuch numbers of ſhoots broke, and dangling down, as will ſurpriſe any planter who has not been accuſtomed to theſe infected trees; and this is the occaſion why the firs in ſome places are ſuch poor paltry trees to what they are in others that are free from this inſect: and as they live in any ſituation near the ſea, as well as farther in the country, therefore, if ſome method is not found out to kill them, we may ſoon expect to ſee all our noble plantations of firs and pines deſtroyed throughout the kingdom, for every

year

year they ſpread in a terrible manner; and whoever buys any firs, or pines, from an infected nurſery, is almoſt ſure to propagate theſe terrible deſtroyers; for which reaſon great caution ought to be uſed in examining whether the nurſery is infected or not, from whence you intend buying your trees; and whoever has got a parcel of infected trees, the beſt way to deſtroy the inſect is to cut up the trees in May, and burn the branches, for there is no other way of clearing them if your trees are above ten feet high.

This ſeaſon I have diſcovered another inſect, unknown to any planter I ever met with, and yet ſeeming to be one which will deſtroy more trees than all other accidents put together; there being but few trees or ſhrubs, evergreens excepted, but what are killed by this inſect at moving, although hitherto they have been ſuppoſed to be killed by the ſeaſon, or ſome other accidents.

It is not very buſy till April; for which reaſon your early ſhooting trees often eſcape: but at that time it is upon moſt young trees that are newly planted, and eats the outward bark off in many places all round the ſhoots; which cauſes them to look brown, and die: in others it eats out the eye of the ſhoots, and that often when they have begun to bud out finely for growing; by which means it kills all the part above ground: but if the tree is of the fruit ſort, it will often ſhoot out at bottom from the ſtock. If a proper attention is not given to find out means to deſtroy thoſe inſects, which are of the fly kind, they will be a great nuſance to all planters.

Laſt year I had a large quantity of fruit trees ſpoiled by them, which were not tranſplanted; and alſo numbers of ſhrubs and roſes killed: and this year they began to attack a large quarter of new grafted apples, and numbers of choice ſhrubs, ſo that I was greatly frighted at the havock which they made; but I ſoon diſcovering ſome of them, and as they at that time could not fly, they were eaſily killed.

This inſect is of the fly kind, near the ſize of a fern-fly, but more taper, and longer, and of a greyiſh colour, with a ſmall ſharp head, and two long horns, or feelers. Thoſe I ſaw had no wings, but I ſuppoſe they have them in May, at which time they are all gone.

To the Editors of the GENERAL MAGAZINE.

Gentlemen,

AS you have promiſed your correſpondents the indulgence of engravings, of any new and curious machine or inſtrument, that may be thought worthy a place in your monthly collection, is the reaſon of my troubling you with a draught and deſcription of the following new invented micrometer. — Having, in the year 1761, during the tranſit of Venus over the Sun, attempted to meaſure the diameter of Venus with different teleſcopes, viz. an 18 inch reflector, 8 and 13 feet refractors, with Kirchius's micrometer in each; the reſult of which, though taken with the utmoſt care, differed ſeveral ſeconds.

This put me upon contriving, if poſſible, a better micrometer, the reſult of which is the draught and deſcription I here ſend you: and ſoon after, in the ſame year, with the aſſiſtance of an ingenious clock-maker, I made two; one of which I have now by me, and the other I preſented

preſented to a worthy gentleman of my acquaintance, who was particularly fond of making aſtronomical obſervations. Theſe being the only two I believe ever yet made of the kind, I make no doubt but will merit a place in your uſeful and general magazine, which, I dare ſay, will oblige many of your other correſpondents, as well as

Your very humble ſervant,

B. TALBOT.

Teacher of the mathematics at Cannock, Staffordſhire.

A Deſcription of a new MICROMETER, *invented in the year* 1761. *By* B. TALBOT.

FIgure 1. is a ſection of it, ſuppoſed to be cut through at the focus of the object-glaſs; in which *a b* is a male ſcrew, one half of whoſe threads are what I call a right-hand ſcrew, and the other half a left-hand ſcrew, and both halves having the ſame number of threads in an inch. *c c* are two female ſcrews, exactly fitting the male ones, and part of the braſs being filed away, they make the two ſtandards for fixing the very fine wires or hairs *g g*, which are faſtened by a ſmall hole in the blocks C C, and at top by the ſmall ſcrews *b b*. — A B and A B are two braſs plates (about an inch broad, and two long,) which contain, or hold, the micrometer-ſcrew *a b*; and theſe plates are fixed, by two ſcrews, to a braſs bar *d d*; in this bar is a ſmall groove, in which the bottom of the blocks, or ſtandards, C C, (being filed thin) are fitted, ſo as to ſlide tight along and keep the ſtandards from ſhaking. At *a* is a little braſs knob with a ſquare hole in it, to fit the ſmall ſquare end of the micrometer-ſcrew at *a*, and ſerves to turn the ſaid ſcrew round backwards or forwards, by which means the ſtandards, C C, and conſequently the hairs *g g*, recede from, or approach to each other with an equal velocity, and, if continued, will meet exactly in the axis of the teleſcope, or center of the field of view. At the bottom of the little knob *a* is fixed a ſmall ſteel index or finger, moving round a circle drawn on one of the plates A B, this circle is divided into ſixty equal parts, and figured 10, 20, &c. to $\frac{60}{0}$.

And near the other end of the ſcrew *a b* is fixed into it a ſmall ſtud or pin *e*, which moves the wheel *f* containing 30 teeth; on the axis of this wheel is fixed an index *i* moving round a circle drawn on the other plate A B, and divided into thirty equal parts, and figured 5, 10, &c. to $\frac{30}{0}$.

Now, theſe indices always ſhew how many revolutions, and parts, of the micrometer-ſcrew the hairs are aſunder, for while the ſcrew makes a revolution the index *a* moves over 60 diviſions; but the index *i* moves over but one. So by having the number of threads of the ſcrew in an inch, and the focal length of the object-glaſs made uſe of, the angle becomes known, and ſo a table may be made to ſhew the angle anſwering any number of revolutions or parts thereof, almoſt by inſpection. Or it will be eaſy to compute the focal length of an object-glaſs, that one minute may exactly correſpond to one revolution of the ſcrew; and then the indexes will always ſhew, by inſpection, the minues and ſeconds contained between the hairs of the micrometer.

In my micrometer there is very near 64 threads in an inch, viz. 30 revolutions = ,94 parts of an inch, therefore

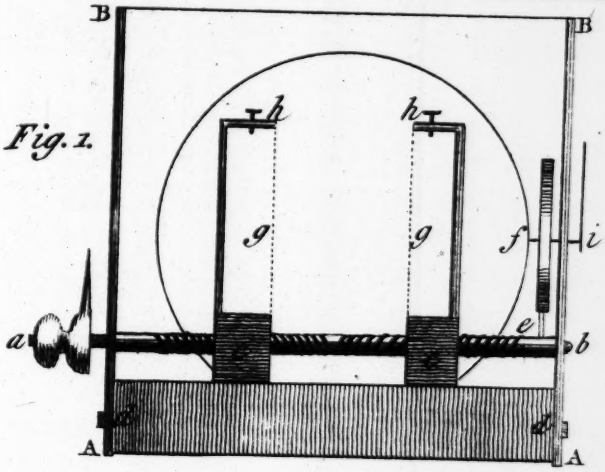


Fig. 1.

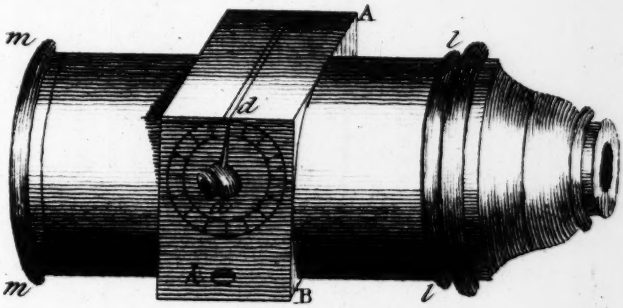


Fig. 2.

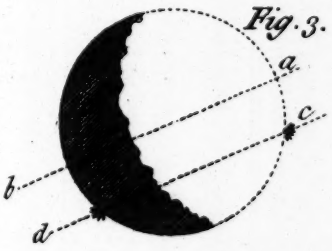


Fig. 3.

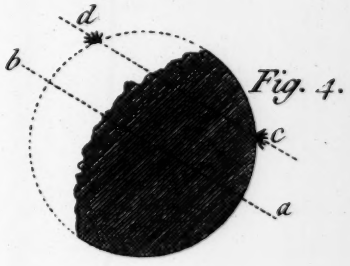


Fig. 4.

Fig. 5.

For the General Magazine.

Therefore as tangent 15′ : $\frac{,94}{2}$ :: radius : 107,7 inches, or 9 feet, nearly, the focal length of an object-glaſs that will ſhew minutes and ſeconds by inſpection of the indexes.

Fig. 2. contains a perſpective view of the micrometer (diminiſhed nearly to half its ſize,) as fixed in the frame, or eye-piece, of the refracting teleſcope, which in mine is made of wood, and turned round at each end, but left ſquare in the middle, as in the figure. In the middle of this ſquare part is ſawed a notch, juſt wide enough to contain the braſs bar *dd*, and ſtandards CC (mentioned in fig. 1.) and ſo deep as to permit the bar to lie level with the ſquare part of the frame, and the braſs plates being of the ſame length and breadth as the ſquare part of the frame, fit cloſe to the ſides thereof, when the micrometer is ſlipped down into the ſlit or notch, and are faſtened by two ſcrews one of which is ſeen at *k*, the other cannot be ſeen in this view. — The eye-piece unſcrews at *ll*, in order to take out the eye-glaſs to clean, &c. there may alſo be a ſcrew at *m*, *m*, to ſcrew it to the tube of the teleſcope, or it may be fixed by glewing the tube into it as is done in mine.

Having deſcribed the mechaniſm of this moſt ſimple, but accurate inſtrument, I ſhall point out a few of the uſes and advantages this micrometer has over any other I have yet made uſe of, or ſeen deſcribed.

1°. In obſerving the planets diameters, it is well known to ſuch as have been uſed to Kirchius's micrometer (of two ſcrews moving in a ring and meeting in the center of the field of view) the obſervations are momentary; but with mine it will be found quite otherwiſe, for having adjuſted the hairs nearly to the planet's diameter, and turned the tube with the micrometer in ſuch manner that the planet may paſs exactly between, juſt touching each hair thro' the whole field of the teleſcope, the obſervation may be improved, or corrected, for the ſpace of a minute and half, or two minutes, and conſequently the diameter taken with the utmoſt eaſe and exactneſs.

2°. In the occultations of the fixed ſtars, &c. if one of the hairs in my micrometer be made to biſect the moon at right angles to the cuſps, or nearly ſo, and the other to touch the ſtar near the point of immerſion, it will alſo cut the other edge of her diſk in the point of emerſion; for want of knowing which, the obſerver may miſs the moment of emerſion. See fig. 3, and 4. where *a b* is the biſecting line, *c* the point of immerſion, and *d* that of emerſion.

3°. When any of the planets are ſo near to a known fixed ſtar as to be both within the field of the teleſcope, the difference of right aſcenſions and declinations are found thus, turn the micrometer and adjuſt the ſcrews in ſuch manner that the ſtar moving along one hair, the planet may move along the other, then will the micrometer ſhew their difference of declinations, and turning the tube of the micrometer $\frac{1}{4}$ round, and adjuſting the hairs ſo that when the ſtar touches one, the planet may touch the other hair, then will the micrometer ſhew the difference of right aſcenſions, ſee fig. 5. in which *a* ✱ and ♂ *b* ſhew the poſitions of the hairs in the difference of the declinations; and *c* ✱ and ♂ *d* in the difference of right aſcenſions. Note, this is the true difference of right aſcenſion if the planet be in or very near the equinoctial, otherwiſe muſt be increaſed in proportion of the co-ſine of the planet's declination to the radius. — I might have added more, but as room will not

not permit I ſhall only juſt mention, that theſe micrometers may be eaſily applied to the reflecting teleſcope, and obſervations made with the ſame eaſe and exactneſs.

The Caſe of a Man who was poiſoned by eating Monkſhood, or Napellus, by Mr. Vincent Bacon.

ABOUT ten at night, Mr. Bacon was called to one John Crumpler, a ſilk-weaver in Spital-fields; when he came into the room, he found him lying on the bed, with his head ſupported by a by-ſtander, his eyes and teeth fixed, his noſe pinched in, his hands, feet, and forehead cold, and all in a cold ſweat, no pulſe to be perceived, and his breath ſo ſhort, as ſcarce to be diſtinguiſhed. Upon enquiry Mr. Bacon was told, that he had been very well all day, and about eight had eat a very hearty ſupper of pork, and a ſallad dreſſed with oil and vinegar, immediately after which he began to find an indiſpoſition. That the ſallad conſiſted of common ſallad herbs, bought at a ſtall in the market, except ſome ſellery picked out of their own garden. Mr. Bacon ſuſpecting that he had been eating ſome poiſonous herb, aſked if he found in the beginning of the diſorder any inclination to vomit? and he was told none; but that when he found his illneſs come upon him with great violence, he thought himſelf poiſoned, and forthwith drank a large quantity of oil, about a pint in all, and after that loaded his ſtomach with carduus tea till he vomited; and though he threw up the greateſt part of his ſupper, yet the ſymptoms ſtill increaſed, which made Mr. Bacon be ſent for; but before he could get to him, things were now come to the extremity above deſcribed. Having nothing at hand but a tea-ſpoonful or two of ſpirit of hartſhorn, he forced open his teeth with the handle of a ſpoon, and as his head was reclined, he poured the ſpirit into his mouth, which rouzed him a little, and firſt ſet him a coughing, and next a vomiting. Mr. Bacon took the advantage of the little ſenſe that was returned, and continued plying the patient with carduus-tea, till he had vomited ſeveral times more; but he could not hinder his ſwooning often between the times of reaching, tho' he gave him after each time 40 or 50 drops of *ſal volatile & tinctur. croc. ana. p. æ*, in a glaſs of wine; the patient at length began to find a working downwards, as he afterwards expreſſed himſelf, which was followed by a ſtool; after which he vomited two or three times more, and then he ſaid his head was ſo heavy, and his ſtrength and ſpirits ſo exhauſted, though his ſtomach and bowels were much eaſier, that he muſt needs lie down: his pulſe was then a little returned, though very much interrupted and irregular, ſometimes beating two or three ſtrokes very quick together, and then making a ſtop of as long or a longer time than the preceding ſtrokes together took up. Having obſerved that what he had laſt vomited was little more than the pure carduus-tea, Mr. Bacon, gave him a draught made of *aq. epidem. ther. androm. conf. alkerm. &c.* and gave orders to make him ſome ſack-whey to drink between whiles, ſometimes alone, and in caſe of great faitneſs, with ſome of the abovementioned drops. It being about one o'clock, Mr. Bacon left him; and calling to ſee him next morning, he found him much better: the patient had laid

laid awake, though ſtill, an hour or two after he left him; but being very cold and chilly, had a great deal of covering laid upon him, and then he had a kindly warmth come over his limbs, ſucceeded by a moderate ſweat, and then a quiet ſleep of four or five hours, from which he waked very much refreſhed: his ſenſes had never failed him but during the ſwoonings. Mr. Bacon could ſee none of the ſallad but the ſellery, which being the produce of their own garden, the boy who gathered it the evening before was ordered to fetch ſome more of the ſame: he preſently brought a ſpecimen, which Mr. Bacon took to be the common Monkſhood of our gardens, called by Moriſon in his *Prælud. Botan. Aconitum Spica Florum Pyramidali.*

The alterations the patient found in himſelf after eating it, and the manner they came on, were as follows: the firſt ſymptom was a ſenſation of a tingling heat, which not only affected his tongue, but his jaws; ſo that his teeth ſeemed looſe, and his cheeks ſo much irritated, that the people about him, nay even his looking glaſs, could ſcarce perſuade him, but that his face ſwelled to twice its proper ſize: this tingling ſenſation ſpread itſelf farther and farther, till it had taken hold of his whole body, eſpecially the extremities: he had an unſteadineſs in the joints, eſpecially of the knees and ankles, with twitchings upon the tendons, ſo that he could ſcarce walk acroſs the room; and he thought that in all his limbs he felt a ſenſible ſtop or interruption in the circulation of the blood; and that from the wriſts to the fingers ends, and from the ankles to the toes, there was no circulation at all; but he had no ſickneſs or diſpoſition to vomit, till he took the oil, &c. Afterwards his head grew giddy, and his eyes miſty and wandering; and next, a kind of humming or hiſſing noiſe ſeemed continually to ſound in his ears, which was followed by the above-mentioned ſyncopes.

A woman who had ſupped with the patient, having before been out of order, and not then perfectly recovered, eat but ſparingly; but took this ſuppoſed ſellery along with the other herbs, and felt and complained of all the ſame ſymptoms, but in a leſs degree than the man had done. She would not be prevailed on to vomit, but only took the cordial draught above deſcribed. The man became quite well, but the woman continued ſtill out of order: and yet there was not put into the whole ſallad more than what grows upon one of the roots.

Upon the Iron of Plants.

THE operations of M. Lemery upon honey, have furniſhed him with an anſwer to a queſtion propoſed by M. Geofroy in the hiſtory of the Acad. 1705. Whether there can be any plants without iron? No matter drawn from plants ſhould ſeem to be more exempted from iron than honey, which is nothing but a very fine extraction from flowers, wrought again in the bowels of the little body of a bee; nevertheleſs M. Lemery, after having taken all poſſible precaution againſt any iron that might have accidentally been mixed with his operations, found in the black coal that remained from the diſtillations of honey ſmall grains that were drawn up by the load-ſtone. Moreover he found ſome iron likewiſe in caſtor,

which is a matter proceeding from an animal.

From hence it muſt follow, either that ſome other ſubſtance beſides iron may be attracted by the loadſtone, or that there is iron formed by the calcination that makes the aſhes, or finally, that it is really contained in plants, and even in ſome of the parts of animals too. M. Lemery holds the latter.

Theſe grains extracted from plants, and upon which the loadſtone acts, are melted with the burning glaſs, exactly after the ſame manner and with the ſame circumſtances as the filings of iron: why ſhould it not be real iron?

One ought to preſume that it is ſo, if nothing hinders us from believing it, and it is by following this kind of reaſoning that M. Lemery anſwers all the difficulties which may be objected. As narrow as the tubes and veſſels of plants are, he proves, that iron may be divided into particles ſmall enough to paſs eaſily through them. As heavy as it is, it can be raiſed when diſſolved in a liquor; it is beyond diſpute that there are particles of earth that aſcend into ſuch veſſels.

A more particular enquiry into the faculty wherewith iron is raiſed up into plants, led M. Lemery to a curious experiment. Upon a diſſolution of filings of iron, by the ſpirit of nitre contained in a glaſs, he poured oil of tartar per deliquium; the liquor ſwelled very much, though with a moderate fermentation, and a little while after it had reſted, there aroſe a kind of branches faſtened to the ſuperficies of the glaſs, which continued ſtill to ſpread themſelves even upon the external ſuperficies. The figure of the branches is ſo perfect, that one may diſcover in them even kinds of leaves and flowers; and this vegetation of iron may as juſtly be called the tree of Mars, as a vegetation of Mercury, though in a different manner, has been termed the tree of Diana. If the liquor, which in aſcending gets over the glaſs without making any branches, is turned upſide down, it quickly begins to aſcend again, and is congealed into branches, either wholly or in part; ſo that you need only turn the glaſs, and that which remained liquid about it will at length be all ſpent in the formation of the tree: there is ſome ſmall variation in the effects, which depends upon the quantity of the diſſolution of iron and of the oil of tartar.

The extreme volatility of this liquor can only be attributed to the iron, ſince it is certain that the ſpirit of nitre and the oil of tartar mixed together would not produce ſuch a vegetation. From thence M. Lemery eaſily comprehends how iron diſſolved in the earth by acids, aſcends even to the ſummits of plants, and perhaps it likewiſe helps the elevation of the ſap; he might fancy too, that the figure which iron naturally makes, when it aſcends in the glaſs, may contribute to that of the plants where it is contained, and does in ſome manner cauſe them to put forth branches; but this conjecture is a little new, and even contrary to ſeveral ſtrong appearances, and muſt therefore be propoſed with caution. It is good to venture ſometimes after this manner as phyſicians do with their medicines, but then you muſt follow their example, and uſe the neceſſary precautions.

Receipt

A Receipt for the Cure of Deafneſs.

PUT a table ſpoonful of bay ſalt into near half a pint of cold ſpring water, and after it has ſteeped therein for twenty-four hours (now and then ſhaking the phial) cauſe a ſmall tea ſpoonful to be poured in the ear moſt effected, every night when in bed, for ſeven or eight nights ſucceſſively, obſerving to lay your head on the oppoſite ſide, by which the cure is generally compleated.

MATHEMATICAL CORRESPONDENCE.

To the AUTHOR *of the* GENERAL MAGAZINE.

SIR,

AS your ingenious correſpondent, Mr. George Brown, has charged me (in your laſt magazine) with being miſtaken in my ſolution to your 16th queſtion, I beg leave to return the ſubſequent anſwer.

Mr. Brown has not only aſſumed the perpendicular of the triangle, to coincide with the tranſverſe axis of the ellipſis; but, in order to depreſs his equation, has taken the liberty to inveſtigate the value of p, which the queſtion calls a certain given line; and ſo, unleſs he can prove a certain given line, and a line to be determined, to be exactly ſynonymous, (which ſeems a contradiction,) he grants a poſtulatum not allowable by the queſtion, and 'tis on this account he tells the world I am miſtaken, a method I think unbecoming a mathematician.

To determine the propoſer's ellipſis from his data only, appears impoſſible; which induced me (at p. 341.) to exhibit the equation of a curve, which ſhall always have that property, and am confident that Mr. Brown is too good a mathematician, to conteſt the truth of any part of that proceſs; becauſe, his own ſolution (obtained by interpolating the data) is only a particular caſe of my equation, and may (as follows) be derived from it.

Suppoſe b, and c, in my equation, to vaniſh, then will $s = 1$, and $y^2 + \overline{\frac{b}{a}\sqrt{a-x}}^2 = \frac{p}{2}\sqrt{x^2+y^2}$, and, by reduction, $y^2 = \frac{p^2}{8} - \overline{\frac{b}{a}\sqrt{a-x}}^2 \pm \frac{p}{8}\sqrt{p^2 + 16x^2 - 16b^2 + \frac{32b^2x}{a} - \frac{16b^2x^2}{a^2}}$, where $a = BD$, $b = AD = DC$, $x = HD$, and $y = HF$ in Mr. Brown's figures to which I refer. Now, in order to extract the preceding root, (the method of doing which, for ſome reaſon Mr. Brown has concealed,) ſuch a value muſt be aſſumed for p^2, as will make the quantity under the radical ſign a complete ſquare; to effect which, take $\overline{p^2 - 16b^2}^{\frac{1}{2}} \times 4x\sqrt{1 - \frac{b^2}{a^2}} = \frac{16b^2x}{a}$; hence, $p^2 - 16b^2 = \frac{16b4}{a^2 - b^2}$ $\therefore p^2 = \frac{16b^2a^2}{a^2-b^2}$, and $p = \frac{4ba}{\overline{a^2-b^2}^{\frac{1}{2}}}$; therefore, by ſubſtituting $\frac{16b4}{a^2-b^2}$, for $p^2 - 16b^2$, under the radical ſign; the root will extract, and be $= \frac{4b^2}{\overline{a^2-b^2}^{\frac{1}{2}}} + \frac{4x}{a}\sqrt{a^2-b^2}$; and conſequently, by ſubſtitution, we ſhall get $y^2 = \frac{2b^2a^2 \pm 2ab^3}{a^2-b^2} - \overline{\frac{b}{a}\sqrt{a-x}}^2 \pm 2bx$, the equation for the two ellipſis:

Now,

Now, when the upper ſign obtains (fig. 2.) $y^2 = \frac{2b^2a}{a-b} - \overline{\frac{b}{a}\sqrt{a-x}}^2 + 2bx$, and when y is a maximum, then $x = a + \frac{a^2}{b}$ (OD,) and when $y = o$, then $x = \frac{a^2}{b} + a \pm \frac{a^2}{b}\sqrt{\frac{a+b}{a-b}} = \left\{\begin{matrix}DE\\DP\end{matrix}\right\}$ $\therefore \frac{a^2}{b}\sqrt{\frac{a-b}{a+b}} =$ the ſemi-tranſverſe, and by writing $a + \frac{a^2}{b}$ for x, in the preceding equation of y^2 we get $y = a\sqrt{\frac{a+b}{a-b}} =$ the ſemi-conjugate, and thence, the diſtance (OD,) between the center and focus $= a + \frac{a^2}{b}$, and $OB = \frac{a^2}{b}$.

But when the under ſign prevails (fig. 1.) then $y^2 = \frac{2b^2a}{a+b} - \overline{\frac{b}{a}\sqrt{a-x}}^2 - 2bx$, and when y is a maximum then $x = a - \frac{a^2}{b}$ $(= -OD,)$ and when $y = o$, then $x = a - \frac{a^2}{b} \pm \frac{a^2}{b}\sqrt{\frac{a-b}{a+b}} = \left\{\begin{matrix}DE\\DP\end{matrix}\right\}$, $\therefore \frac{a^2}{b}\sqrt{\frac{a-b}{a+b}} =$ the ſemi-tranſverſe; and by writing $a - \frac{a^2}{b}$ for x, in the preceding equation of y^2, we get $y = a\sqrt{\frac{a-b}{a+b}}$ $=$ the ſemi-conjugate, and thence, the diſtance (OD,) between the center and focus $= \frac{a^2}{b} - a$, and $OB = \frac{a^2}{b}$, where O denotes the center of each ellipſe.

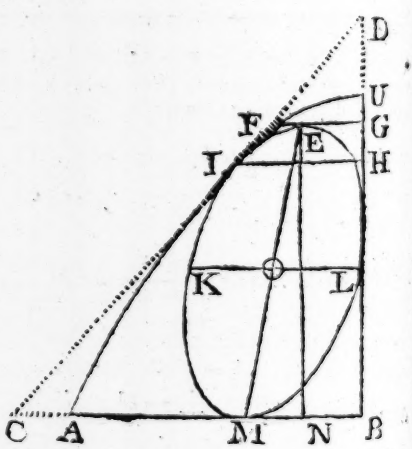
Scholium. If Mr. Brown's ab $(= AD = DC)$ be ſubſtituted for its equivalent b, in the preceding expreſſions; then, will his tranſverſe and conjugate axis be manifeſt.

N. B. I always underſtood that the excellency of a queſtion, muſt neceſſarily conſiſt in its utility, and perſpicuity; not, in what is uſeleſs, obſcure and ambiguous, which ſeems to be the very caſe of your 16th queſtion; therefore, your readers may judge with what propriety Mr. Brown's epithet is beſtowed on that problem. —— If Mr. D. Waugh, do not (according to his promiſe) prove my procedure at p. 341, to be falſe; his *ipſe dixit* is inſignificant, and his reputation will ſuffer.

THOMAS TODD.

Queſtion 18. *(in the laſt magazine) anſwered by the propoſer, Mr.* G. BROWN, *of Portſmouth Common.*

PUT VB $= 44 = a$, BA $= 56 = b$, VH $= x$, CM $= z$, DG $= v$. Then per property of the parabola, as $a : b^2 :: x : HI^2 = \frac{b^2x}{a} = rx$, and $HI = \sqrt{rx}$; again, as $2x : \sqrt{rx} :: a + x : BC = \frac{a+x \times \sqrt{rx}}{2x}$; but as $a + x : v :: z : EG = \frac{vz}{a+x}$; $2x : \sqrt{rx} :: v : GF = \frac{v}{2}\sqrt{\frac{r}{x}}$, and $FE = \frac{v}{2}\sqrt{\frac{r}{x}} - \frac{vz}{a+x}$, then $FE \times CM = \overline{KO}^2 = \frac{vz}{2}\sqrt{\frac{r}{x}} - \frac{vz^2}{a+x}$, and $EN =$



$a + x$

$a+x-v$ ∴ $.7853982 \times KL \times EN = .7853982 \times 2\sqrt{\frac{vz}{2}}\sqrt{\frac{r}{x}-\frac{vz^2}{a+x}} \times a+x-v$ = area of the inscribed ellipsis EKML, which per quest. must be a maximum, or $\overline{a+x-v}^2 \times vz\sqrt{\frac{r}{x}-\frac{2vz^2}{a+x}}$ a maximum, make v flow ∴ $a+x=3v$; make z flow ∴ $z=\frac{3v}{4}\sqrt{\frac{r}{x}}$; make x flow ∴ $x=\frac{a}{3}=14\frac{2}{3}$; $v=\frac{4a}{9}=19\frac{5}{9}$ and $z=\frac{b\sqrt{3}}{3}=32.3316$: Now to find the two principal diameters of the ellipsis; put t = semi-transverse and c = semi-conjugate ∴ $2t$ and $2c=\frac{2}{9}\sqrt{3b^2+6ba+4a^2} \pm \frac{2}{9}\sqrt{3b^2-6ba+4a^2}$ = 50.526347 and 28.898747, its area = $.7853982 \times \frac{16ab}{27}$ = 1146.797727, the required dimensions and area of the greatest inscribed ellipsis EKML. Q. E. I.

To the AUTHOR, *&c.*

SIR,

THE above solution will be a sufficient answer to your reference underneath question 18. in the last Magazine; and so will my solution (to quest. 16.) prove Mr. Todd's *sol. to be false*, (for he did not understand the question, as it appears from the beginning of his solution) notwithstanding what you have said to the contrary at p. 402, &c.

Your most humble servant to command,

GEO. BROWN.

MATHEMATICAL QUESTIONS, *answered.*

Quest. 31. *Answered by Mr.* John Clarke, *of Lincoln, the Proposer.*

LET x be the required number; then, per question $\frac{x-4}{12}=n$ a whole number, and consequently $x=12n+4$; but $\frac{x-20}{22}=\frac{12n-16}{22}=\frac{6n-8}{11}$ is also a whole number, by question; and consequently $\frac{12n-16}{11}$; but $\frac{11n-22}{11}$ is a whole number, and therefore the difference of these two, viz. $\frac{n+6}{11}=m$ a whole number, and $n=11m-6$; and $x=13m-68$; therefore 64 is the number required.

The same answer is given by Messrs. Tytler, Priestly, Gough, Todd, Probert, Barker, Sewell, Edwards, Barber, *and* Dalby.

Quest. 32, *answered by Mr.* Thomas Walker,* *of Stantonbury, Bucks.*

PUT $a=500$; then by solving a quadratic equation, you'll have, $z=\sqrt{x^2+a^2}-a$; put $S^2=x^2+a^2$; and $S-a=\sqrt{x^2+a^2}-a=z$. Then $S^2-a^2=x^2$; whose

* *It seems, this gentleman, notwithstanding the zeal he lately exerted against plagiarism, has very faithfully copied this question and its solution, from the Palladium; we therefore chose to give both question and solution verbatim as he sent it to us, that our readers might be able to compare them with the originals. For the question vid. Palladium 1754, p. 12. question 8. (83) and for the Answer vid. Palladium 1755, p. 23.*

whoſe root let be repreſented by $ca - S$. Here c is the quantity aſſumed, then $c^2a^2 - 2caS + S^2 = S^2 - a^2$; and $c^2a^2 + a^2 = 2caS$; or $c^2a + a = 2cS$, hence $S = \frac{c^2a+a}{2c}$; and $S - a = \frac{c^2a+a}{2c}$; $-a = z = \frac{ca}{2} - a + \frac{a}{2c}$ a general theorem for z and $ca - \frac{c^2a+a}{2c} = \frac{ca}{2} - \frac{a}{2c}$ a general theorem for x.

Therefore the problem is reduced to this, to find all the diviſors of $a = 500$. Integral diviſors to have the anſwer in whole Numbers,—And all the diviſors of 500 are — 1. 2. 4. 5. 10. 20. 25. 50. 100. 125. 250. 500. Then,

Let $2c =$	then $z =$	and $x =$
4	125	375
5	225	525
10	800	1200
20	2025	2475
25	2645	3105
50	5760	6240
100	12005	12495
125	15129	15621
250	30752	31248
500	62001	62499

Therefore this queſtion is capable of 10 anſwers in whole numbers.

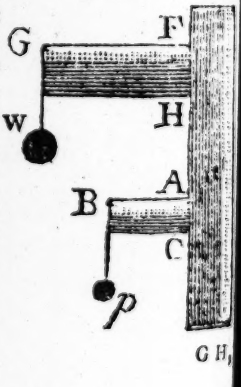
Queſt. 33, *anſwered by* Mechanicus.

IF $c = 3.141592$, &c. then per equation $y^2 = \frac{x^5}{\overline{a+x^3}^{\frac{1}{2}}}$, and the fluxion of the ſolid is $cy^2\dot{x} = \frac{cx^5\dot{x}}{\overline{a+x^3}^{\frac{1}{2}}}$, whoſe correct fluent $= -\frac{4ac+2cx^3}{9}\sqrt{a+x^3} + \frac{4ca^{\frac{3}{2}}}{9}$ the ſolid itſelf. And ſince $y = \frac{x^{\frac{5}{2}}}{\overline{a+x^3}^{\frac{1}{4}}}$ $\therefore \dot{y} = \frac{10ax^{\frac{3}{2}}\dot{x} + 7x^{\frac{9}{2}}\dot{x}}{4.\overline{a+x^3}^{\frac{5}{4}}}$, and conſequently the fluxion of the convex ſurface is $2cy\dot{z} = 2cy\sqrt{x^2+y^2} = \frac{2cx\dot{x}x^{\frac{5}{2}}}{\overline{a+x^3}^{\frac{1}{4}}}$ $\sqrt{1 + \frac{10ax^{\frac{3}{2}} + 7x^{\frac{9}{2}}}{4.\overline{a+x^3}^{\frac{5}{4}}}}^2$, whoſe correct fluent equated with b, and thence the value of x in terms of a and b muſt be ſubſtituted in the theorem for the ſolidity, which being a maximum by the queſt. its fluxion muſt vaniſh, the flowing quantity being a, whoſe value in terms of b, will be obtained, and thence x and y will follow.

Mr. Barber *(the propoſer,) Mr.* Barker, *and Mr.* Adams, *alſo ſolved this queſtion.*

Queſt. 34, *anſwered by Mr.* T. Todd, *of Weſt-Smithfield.*

SUppoſe w, the weight of the given beam B C; p the weight ſuſpended at the end B, and length B A $= n$; alſo, let $x =$ G F, the length of the required beam G H; and W $=$ the weight ſuſpended at its End G: then, ſince the weights of ſimilar homogeneous ſolids are in the triplicate ratio of their homologous ſides, we have $n^3 : x^3$ (B A C^3 : F H^3) : : $w : \frac{wx^3}{n^3} =$ weight of the beam G H, and (by cor. 1. prop. 71. of Emerſon's mechanics,) a weight equally diffuſed over the whole beam has the ſame effect to break it, as half that weight ſuſpended at its end; therefore, the ſtreſs upon B C, at A, (by prop. 69, of the ſame book) is $\frac{w}{2} + p \times n$, and that upon



G H,

G H, at F, is $= \frac{w x^3}{2 n^3} + W \times x$; but, ſince theſe beams are ſuppoſed but juſt able to ſupport the weights P, and W; conſequently, their ſtrength will be as their ſtreſs; that is, $n^3 : x^3$ (or A C^3 : F H^3) $:: \frac{w n}{2} + p n : \frac{w x^4}{2 n^3} + W x$; from which we get $W = \frac{w x^2 + 2 p x^2}{2 n^2} - \frac{w x^3}{2 n^3}$ a maximum by the queſtion; let its fluxion vaniſh, &c. and x will $= \frac{2 n}{3 w} \times \overline{w + 2 p}$, and thence F H $= \frac{2 A C}{3 w} \times \overline{w + 2 p}$, $W = \frac{2}{27 w^2} \times \overline{w + 2 p}^3$, and the weight of the beam G H $= \frac{8}{27 w^2} \times \overline{w + 2 p}^3$.

Cor. 1. The greateſt weight W, that can be ſupported at the end G, by the required ſimilar beam, will be juſt $\frac{1}{4}$ of the beam's abſolute weight.

Cor. 2. If W be ſuppoſed to vaniſh, then by reduction we ſhall find the length G F, of a beam ſimilar to that given, of the ſame timber, which can but juſt ſuſtain itſelf. . . . . $= \frac{n}{w} \times \overline{w + 2 p}$, and a ſide F H $= \frac{A C}{w} \times \overline{w + 2 p}$.

Cor. 3. And a ſimilar beam of the ſame timber of greater dimenſion, muſt break by its own weight. See Emerſon's Mechanics, 2d edit. p. 111.

New QUESTIONS *to be anſwered.*

Queſt. 39. *By Mr.* Thomas Sadler, *of Newhall, in Cheſhire.*

QUERE, the year, month, and day of the month, when an author began a book of ſcience, and entertainment, from the following equations, viz.

$$x + y + z = 1779$$
$$x y + z^2 = 14161$$
$$x^2 + y z = 3'11742$$

Note x = the year, y = the month, and z = the day of the month.

Queſt. 40. *By Mr.* G. Cetii, *of Greenwich.*

GIVEN the tranſverſe and conjugate diameters of an ellipſis = 40 and 30 reſpectively, alſo a parabola deſcribed on the tranſverſe as a baſe, and whoſe abſciſſa is equal to the conjugate, to determine the length of a right line terminating in the curves, and drawn thro' the focus of each ſection; alſo the area of each ſegment of the two ſections as divided by the line in that direction?

Queſt. 41. *By Mr.* Iſaac Dalby, *of Quarhouſe in Lincolnſhire.*

NOT far from me, a lovely laſs does dwell,
In wit and beauty none can her excel;
She's lov'd by all—the old, the young, and gay,
And—cruel—maid—hath ſtole my heart away:
Then analyſt's, if you will tell to fame
The two initials of this fair one's name,
From the equations here expos'd to view,*
Another time I'll do as much for you.

* *viz.* $\left\{\begin{array}{l} x^3 - 8 y^3 = 1736 \\ x^2 - 4 y^2 = 68 \\ \frac{x^2 y}{2} - x y^2 = 144. \end{array}\right\}$ To be ſolved by a ſimple equation.

Where x and y repreſent their places in the alphabet.

Queſt. 42. *By Mr.* John Barber, *of Saxmundham in Suffolk.*

GIVEN $a^2 y^4 + a^4 x^3 y = m y^4$, to find x in terms of y.

Queſtion 43. *By Mr.* Tho. Barker *of Wiſſet, in Suffolk.*

REquired the dimenſions, and area of that curve, whoſe equation is $a^3 + x^{\frac{3}{2}} \times y^4 = x^{\frac{7}{2}} y^4$; when $a^3 = 111703.5$, and length of the ſubtangent = 1.1428?

Queſt. 44. *By Mr.* George Brown, *of Portſmouth Common.*

REquired the dimenſions of the leaſt ſemi com. parabola, that will circumſcribe an ellipſis, whoſe tranſverſe and conjugate diameters are 56 and 38?

A Catalogue of all the Solar Eclipſes that will be viſible at London, *from the Year* 1764, *to the End of the Century. By Mr.* James Denham, *of* Norwich.

No.	*Year, Month, &c.*	*Beg.* h.	m.	*Middle* h.	m.	*End* h.	m.	*Dur.* h.	m.	*Dig.* °	′
1	1765, Aug. 16, N. S. Aftern.	3	38	4	9	4	54	1	16	1	51
2	1766, Aug. 5, Aftern.	5	26	6	21	7	8	1	42	4	48
3	1769, June 4, Morn.	6	41	7	36	8	27	1	46	6	3
4	1777, Jan. 9, Aftern.	3	52	Sun-ſets		Eclipſed				1	35
5	1778, June 24, Aftern.	3	42	4	41	5	30	1	48	6	12
6	1779, June 14, Morn.	7	24	8	9	8	43	1	19	2	35
7	1781, Apr. 23, Aftern.	6	41	7	9	End aft. ſun-ſet				00	42
8	1781, Oct. 17, Morn.	6	57	7	45	8	28	1	31	4	6
9	1782, Apr. 12, Aftern.	6	20	Sun-ſets		Eclipſed				4	35
10	1787, Jan. 19, Morn.	10	9	10	47	11	13	1	4	00	46
11	1787, June 15, Aftern.	4	13	5	00	5	50	1	37	5	20
12	1788, June 4, Morn.	7	34	8	17	9	13	1	39	4	2
13	1791, Apr. 3, Aftern.	12	32	2	00	3	18	2	46	7	34
14	1793, Sep. 5, Morn.	9	40	11	7	12	43	3	3	9	24
15	1794, Jan. 31, Noon.	11	2	12	2	12	46	1	44	2	20
16	1797, June 24, Aftern.	4	48	5	27	6	13	1	25	3	48

N. B. Theſe Eclipſes were carefully conſtructed by Ferguſon's Tables for the Meridian of London, and reduced to apparent Time, by which the ingenious reader may by Inſpection be inform'd (or compare them with thoſe already done from other Tables) of the Number, Times, and what Quantity the Sun will be eclipſed for above 30 Years to come.

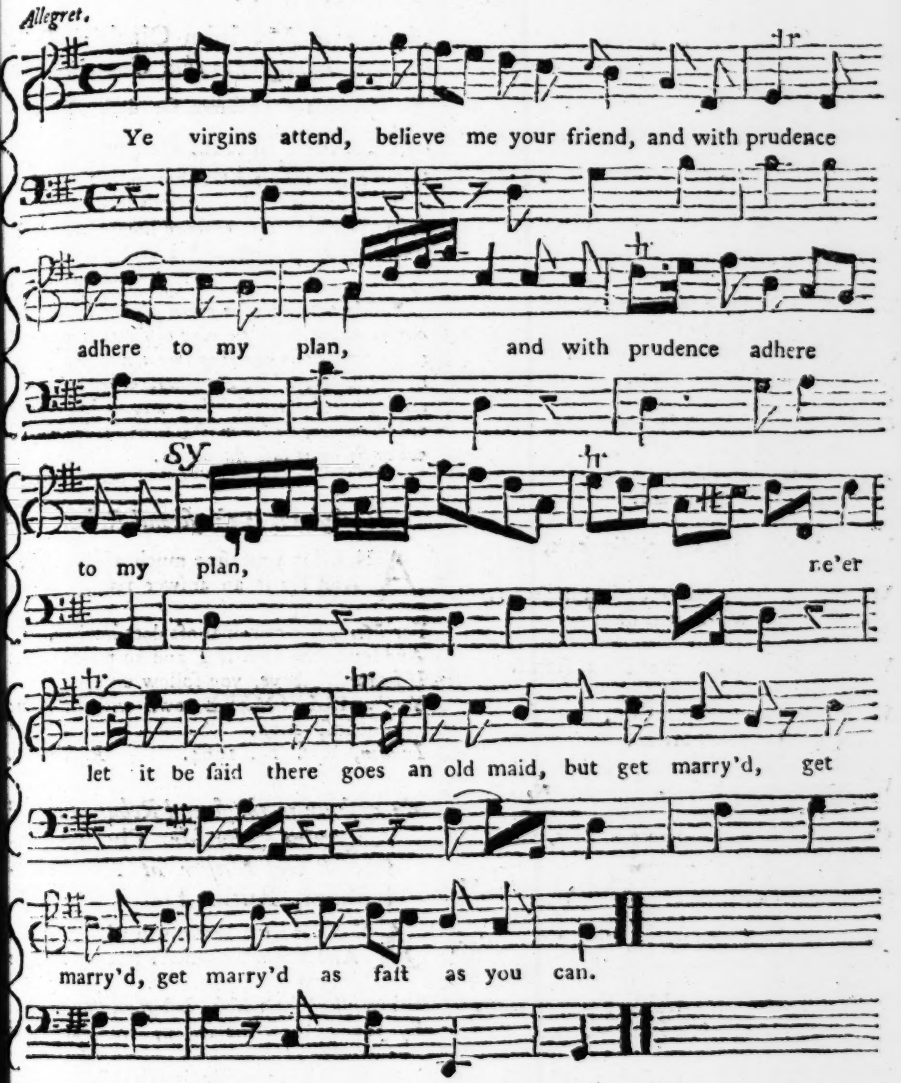
Apparent Times of the Eclipſes of Jupiter's *Satellites, which will happen in* Oct. 1764, *computed, from New Tables, to the Meridian of the* Royal Obſervatory *at* Greenwich.

D	I. Satellite. Immerſions. H.	M.	S.	D	H.	M.	S.	D	III. Satellite. H.	M.	S.	
2	16	26	45	27	11	9	31	2	13 *	56	40	I
4	10 *	55	40	29	5	33	36	2	16 *	46	51	E
6	5	24	33	31	0	6	36	9	17 *	57	8	I
7	23	53	26	II. Satellite. Immerſions.				9	20	50	2	E
9	18 *	22	17					16	20	57	9	I
11	12	51	9	2	1	2	7	17	0	50	50	E
13	7	20	2	5	14 *	19	53	24	1	56	42	I
15	1	49	41	9	3	37	40	24	4	51	10	E
16	20	17	29	12	16 *	55	30	31	5	55	33	I
18	14 *	46	12	16	16	13	12	31	8	50	52	E
20	9	14	55	19	19	30	48	IV. Satellite.				
22	3	43	40	23	8	47	20	9	23	39	19	I
23	22	12	22	26	22	5	53	10	2	46	50	E
25	16 *	40	53	31	11 *	22	18	26	17 *	43	0	I
								26	20	55	30	E

None but thoſe marked * are viſible at *Greenwich*.

We hope Mr. Prieſtly *will excuſe our not inſerting his eſſay, which was owing to a miſtake of the engraver, but it will be inſerted without fail in our next.—Mr.* Gouch's *drawing is received, and ſeveral other favours from our correſpondents, which ſhall have due regard paid to them.*

A NEW SONG.



II.

As ſoon as you find your hearts are inclin'd,
To beat quick at the ſight of a man;
Then chooſe out a youth, with honour and truth,
And get married as faſt as you can.

III.

For age like a cloud, your charms ſoon will ſhroud,
And this whimſical life's but a ſpan;
Then maids make your hay, while Sol darts his ray,
And get marry'd as faſt as you can.

IV.

The treacherous rake, will artfully take,
Ev'ry method poor girls to trepan;
But baffle the ſnare, make virtue your care,
And get marry'd as faſt as you can.

V.

And when Hymen's bands have join'd both your hands.
The bright flame ſtill continue to fan;
Ne'er harbour the ſtings that jealouſy brings,
But be conſtant and bleſt while you can.

POETRY.

CONTENT.

WHEN roſy morn with lib'ral hand,
Unbars the gate of light,
Ambroſial foams bedew the land,
While Phœbus wings his flight.

Sweet Philomela then proclaims,
The harbinger of day;
In concert join'd thro' woods and plains,
And brutes good-morrow ſay.

The ruſtics too their toil prepare,
With pipe the luſty ſwain,
Calls forth the bleating flocks to ſhare,
The produce of the plain.

Content then treads the velvet green,
Likewiſe the cooling ſhade,
And ev'ry univerſal ſcene,
And ſeeks the muſes aid.

With moral thoughts he gladly ſoars,
On contemplation's wing;
When boiſt'ring winds and Neptune roars,
At Nature's works will ſing.

With joy he views the wond'rous frame,
And ſees its beauty ſhine,
With extacy he does proclaim,
The plaſtic pow'r divine.

Whereever fate has doom'd his ſphere,
His days ſtill peaceful glide;
On friendſhip's coaſt is ſure to ſteer,
To lend the friendleſs aid.

Bromley Academy. John Scally, S. M.

Anſwer to the Rebus in laſt Magazine, addreſſed to Mr Thomas Walker, *now addreſſed to Miſs* Polly Stow.

EXCUSE me miſs Polly—I can't for my life
But think, that friend Walker will make you his WIFE.

Stow, Sept. 7, 1764. *W. Swift.*

Anſwer to Mr. Clark's *Ænigma, addreſſed to* Thomas de Stonton, *in laſt Magazine, now addreſſed to Mr.* Clark.

SIR,

(YOU ſay your Ænig. when mounted high)
It ſtands though running, and when flying lie.
The topping of a bird then it muſt be,
Peeweep—or plover—it is the ſame to me.

W. Swift.

Anſwer to Mr. John Clark's *Ænigma, addreſſed to that Gentleman.*

VArious the themes for dark Ænigmas choſe,
This one thing, that another will propoſe;
Some eaſy, others difficulties plead,
As each propoſer's inclinations lead:
And you, kind Sir, obſcure indeed have dreſt
The *topping of a plover* * I proteſt.

Thomas de Stonton.

* *The topping of a green plover I take it the author meant, but 'tis very obſcure; I was led to the thought in walking into a meadow juſt after I had peruſed the Ænigma, when one of theſe birds preſented itſelf before me, whoſe topping when running before me I obſerved to be erect, but when flying it laid flat down.*

Anſwer to the ſecond Rebus.

AN *Ell* is a meaſure much uſed in trade,
And *Yes* is an anſwer receiv'd from a maid;
For *Mercy* the criminal oft does implore,
And letter the fifth is *E* and no more.
If from the above, you follow direction,
You've ELLESMERE town without farther inſpection.

London, Sept. 15, 1764. *R. Pingſtone.*

An anſwer to the ſecond Rebus in the laſt Magazine. By Mr. Thomas Wilſon, *School-Maſter at* North Luffenham, Rutland.

AN *Ell* is a meaſure much uſed in trade,
And *Yes* is the anſwer receiv'd from the maid,
When aſked for a *Kiſs*, laſt midſummer day,
By young Roger the ſwain, when making of Hay;
'Tis *Mercy* that criminals often do crave;
To theſe if an *E* be connected, you'll have
Fam'd ELLESMERE town much admir'd by many,
For pleaſantneſs ſeated not exceeded by any.

Anſwer to the ſecond Ribus.

FOR a life unattended with envy or ſtrife,
For a conſident friend and induſtrious wife,
For a nymph that is kind and a ſwain that's ſincere,
Ye fates recommend me to fam'd ELLESMERE.

Blackman-Street. J. B.

The ſecond Ænigma in February Magazine, anſwered by Thomas Sadler. *Inſcribed to the Propoſer.*

Dear Clarke,

SHould I but range, to Lincoln, or to Stow,
Then, with my friend, I'd quaf a bowl or two,
Of 'livening PUNCH—To crown the happy day,
I'd ſing a ſong—As Billy Swift might play.
Like true companions we'd ourſelves enjoy,
No leaden chat, ſhould then our peace annoy.
But ſtart Ænigma's, and each other poſe,
Then part in friendſhip, from the *George or Roſe.*

As my rebuſſes in May Magazine are yet unanſwered pleaſe to inſert the following.

O! how I am pleas'd, ſince I've found out each name,
Miſs COCKET, and NORRIS, each fair one proclaim;
So now, my friend Sadler, I hope you will ſend,
Some rebuſſes more, to a rebuſſing friend.

Marbury, Sept. 12, 1764. *Miſ. Polly Podmore.*

Verſes occaſioned by ſeeing ſuch innumerable Satires writ againſt the government; addreſſed to all true lovers of their country.

BElieve me, friends, what e'er ye do,
You'll find this maxim ever true,
In ſpite of all your arts:
Write what you will, ſay backward prayers,
There's no one ruler knows, or cares,
Its coming from your hearts.

Some write for profit, ſome for praiſe,
And ſome,—for want of better ways
To vent their ſpite aloud:
And would you, who your country love,
And truly would its glory prove,
Now mix with ſuch a crowd?

Many there are, (believe this too,
For much I fear, it is too true)
Fierce anger will diſplay,
Who bearing in the common cry,
The eaſier lets—his brother by,
So ſlyly ſteal away.

Tho' all your anger now is juſt,
To this, my friends, I'd have you truſt,
And not to idle noiſes;
Bear bravely in your mind and heart
The truly juſt and honeſt part,
In hopes of caſting voices.

Many there are, would gladly come,
At ſound of Trumpet, and of Drum;
To give their country glory:
But ne'er will join the ſimple ſtrife,
And throw away both peace and life
For meerly whig or tory.

This let your better judgment guide,
And this be too your honeſt pride,
That all you did was free;
Then you ſhall ſay, with joy of heart,
Rejoycing in your noble part,
How few have done like me!

But now, as vice is at its height,
So hard it is to manage right,
All are glad they have not kept it:
And while this cry of knaves and fools,
Declare 'tis only mob that rules,
No wiſe man will accept it.

A ſketch of Paris. By Gallo-Anglus.

LAdies, whoſe dreſs, wit, ſprightlineſs, and air,
Charm, till their plaſter'd cheeks, like ſpectres ſcare.
Men learn'd, polite; and yet ſo much the prig,
Their genius ſeems quite center'd in their wig.
Ferries, and ferrymen, begrim, like Charon:
Plump, chuckling prieſts, dreſt gorgeouſly as Aaron.
Pulpit-Enthuſiaſts, foaming like mad Tom:
Coarſe Vixens, ogling leud in Nôtre Dame.
Pert, ſallow, ſlip-ſhod damſels looſely dreſs'd;
As ris'n from bed, and panting to be preſs'd.
Shades, which the gazer for Elyſium takes,
Till his ſtung noſe ſuſpects the neighbouring jakes.
Nuns joking now; now ſighing "*fleſh is graſs:*"
Friars who catches roar, and toaſt a laſs.
An opera-houſe, large as our city halls;
Fine action, words, cloaths, dreſſes:—diſmal ſqualls.
Round from Pont-Neuf, the view ſuperb and rich;
Grand keys;—the river a genteel Fleet Ditch.
Lame, hackney horſes; as their drivers lean.
Figures unnumber'd, Anti's to the ſpleen.
Old wither'd crones, in gaudy ſilks diſplay'd:
Monks with toupees, and tonſors in brocade.
Taudry, patch'd ſempſtreſſes, begrim'd with ſnuff:
Long-rapier'd pygmies, hid behind a muff.
Shoe-boys with ruffles: lacqueys dreſs'd like qual.——
Such oddities! the town ſeems all a droll.
Turn where we will, our eyes new ſplendors greet,
Whilſt half the city glares a Monmouth Street.

Still

Still motlier (VANITY) would be thy fair,
Had the fam'd painter, Bunyan ſweet, been here.

Aſk Advice, but take your own.

A Common Caſe.

SAys Richard to Thomas, (and ſeem'd half afraid)
I am thinking to marry my miſtreſs's maid:
Now, becauſe Mrs. Martha to thee is well known,
I will do't if thou bidſt me, or let it alone:
Nay, don't make a jeſt on't, 'tis no jeſt to me,
For faith I'm in earneſt, ſo prithee be free.
Said Thomas to Richard — to ſpeak my opinion,
There's not ſuch a b— in King George's dominion!
And I ver'ly believe, if thou knew'ſt her as I do,
Thou'dſt chuſe out a whipping-poſt firſt to be ty'd to:
She's peeviſh, ſhe's thieviſh, ſhe's ugly, ſhe's old,
And a wh--e, and a fool, and a ſlut, and a ſcold.
Next day Richard took her to church and was wed,
And at night told her ev'ry thing Thomas had ſaid.

To Mr. OWEN.

SIR,

YOur ingenious correſpondent who ſent an anſwer in verſe, to the ladies library, ſeems (to me) to have made a few miſtakes; I think they ought to have been as follows,

7 Young.
12 Spectators.
17 Turkiſh-ſpy.
20 Butler.
23 Waterland.
26 Kettlewell.
29 Tillotſon.

J. Clarke.

A List of New Books and Pamphlets, to Auguſt 25, 1764.

1. THE Times. A Poem. By C. Churchill. 2s. 6d. Almon.

All ſatiriſts, from Juvenal down to Churchill, are, what Horace ſays of old men, *Laudatores temporis acti*. Thus our poet begins with ſinging the praiſes of the modeſt times of old; but he very diſcreetly avoids aſcertaining the date of theſe applauded times. He only ſays in general as follows:

The time hath been, a Boyiſh, Bluſhing time,
When modeſty was ſcarcely held a crime,
When the moſt Wicked had ſome touch of grace,
And trembled to meet Virtue face to face,
When Thoſe, who, in the cauſe of ſin grown grey,
Had ſerv'd her without grudging day by day,
Were yet ſo weak an aukward ſhame to feel,
And ſtrove that glerious ſervice to conceal:
We, better bred, and then our Sires more wiſe,
Such paultry narrowneſs of ſoul deſpiſe,
To Virtue ev'ry mean pretence diſclaim,
Lay bare our crimes, and glory in our ſhame.
Time was, e're Temperance had fled the realm;
E're luxury ſat guttling at the helm
From meal to meal without one moment's ſpace
Reſerv'd for buſineſs or allow'd for grace;
E're Vanity had ſo far conquer'd ſenſe
To make us all wild rivals in expence,
To make one fool ſtrive to outvie another,
And ev'ry coxcomb dreſs againſt his brother;
E're baniſh'd induſtry had left our ſhores,
And Labour was by Pride kick'd out of doors;
E're Idleneſs prevail'd ſole Queen in courts,
Or only yielded to a rage for ſports;
E're each weak mind was with externals caught,
And Diſſipation held the place of thought;
E're gambling Lords in Vice ſo far were gone
To cog the die, and bid the Sun look on;
E're a great nation, not leſs juſt than free,
Was made a beggar by Oeconomy;
E're rugged Honeſty was out of vogue,
E're faſhion ſtamp'd her ſanction on the rogue;
Time was, that men had conſcience, that they made
Scruples to owe, what never could be paid.
Was one then found, however high his name,
So far above his fellows damn'd to ſhame,
Who dar'd abuſe, and falſify his truſt,
Who, being great, yet dar'd to be unjuſt?
Shunn'd like a plague, or but at diſtance view'd,
He walk'd the crowded ſtreets in Solitude,
Nor could his rank, and ſtation in the land
Bribe one mean knave to take him by the hand.
Such rigid maxims (O, might ſuch revive
To keep expiring Honeſty alive)
Made rogues, all other hopes of fame deny'd,
Not juſt thro' principal, be juſt thro' pride.

The Poet having thus deſcribed to us the nature of former times, proceeds to ſpecify the nature of the preſent,

Our

Our times more poliſh'd wear a different face,
Debts are an honour; Payment a diſgrace.

He then gives a particular inſtance of ſuch diſgrace in a character defended from Payment by Priviledge, which the Poet adduces as the firſt cauſe of the depravity of the preſent times, by being exerted upon ignominious occaſions. The ſecond cauſe he perhaps more juſtly affirms to be a certain prevalent Meanneſs of ſpirit.

But why enlarge I on ſuch petty crimes?
They might have ſhock'd the faith of former times,
But now are held as nothing — We begin
Where our ſires ended, and improve in ſin,
Rack our invention, and leave nothing new
In vice, and folly for our ſons to do. —
More to increaſe the horror of our ſtate
Meanneſs ſits crowned: —
The venal heroe trucks his fame for gold,
The patriot's virtue for a place is ſold,
The ſtateſman bargains for his country's ſhame,
And for preferment prieſts their God diſclaim.
Worn out with vice her days of pleaſure o'er,
The mother trains the daughter which ſhe bore
In her own paths; the father aids the plan,
And, when the innocent is ripe for man,
Sells her to ſome old dotard for a wife,
And makes her an adultreſs for life. —
Nor are theſe things (which might imply a ſpark
Of ſhame ſtill left) tranſacted in the dark,
No — to the public they are open laid,
And carried on like any other trade,
In fulleſt vigour Vice maintains her ſway:
Free are her Marts, and open at noon-day.
Meanneſs, now wed to Impudence, no more
In darkneſs ſkulks, and trembles as of yore.

So that impudence is a third aggravation of the viciouſneſs of the times. But beſides theſe native courſes of depravity, the poet alledges that we travel round Europe in order to import foreign ones.

With our own Iſland's vices not content,
We rob our neighbours on the continent,
Dance Europe round, and viſit ev'ry court
To ape their follies, and their crimes import.
To different lands for diff'rent ſins we roam,
And richly freighted, bring our Cargo home.

To Holland, where politeneſs ever reigns,
Where primitive ſimplicity remains,
And makes a ſtand, where freedom in her courſe
Hath left her name, though ſhe hath loſt her force.
Where avarice never dar'd to ſhew her head,
Where like a ſmiling cherub, Mercy led
By reaſon, bleſſes the ſweet blooded race,
And cruelty could never find a place;
To Holland for that charity we roam,
Which happily begins and ends at home.

France in return for peace and pow'r reſtor'd
For all thoſe countries, which the hero's ſword
Unprofitably purchas'd, idly thrown
Into her lap, and made once more her own.
France hath afforded large and rich ſupplies
Of vanities full trimm'd, of poliſh'd lies,
Of ſoothing flatteries, which thro' the ears
Steal to, and melt the heart; of ſlaviſh fears,
Which break the ſpirit, and of abject fraud,
For which, alas! we need not ſend abroad.

Spain gives us pride, which Spain to all the earth
May freely give, ———
Gives us ſuperſtition, which pretends
By the worſt means to ſerve the beſt of ends,
And cruelty, which ſtranger to the brave,
Dwells only with the coward and the ſlave;
That cruelty, which led her Chriſtian bands,
With more than ſavage rage o'er ſavage lands,
Bade her without remorſe whole countries thin,
And hold that nought, but mercy was a ſin.

Italia, nurſe of ev'ry ſofter art,
Who, feigning to refine, unmans the heart;
Who lays the realms of ſenſe and virtue waſte,
Who mars whilſt ſhe pretends to mend our taſte:
Italia, to compleat and crown our ſhame,
Sends us a fiend, and Legion is his name.
The farce of greatneſs, without being great,
Pride without pow'r, titles without eſtate,
Souls without vigour, bodies without force,
Hate without cauſe, revenge without remorſe,
Dark, mean revenge, murder without defence,
Jealouſy without love, ſound without ſenſe
Mirth without humour, without wit grimace,
Faith without reaſon, goſpel without grace,
Zeal without knowlege, without nature art,
Men without manhood, women without heart,
Women. who dance in poſtures ſo obſcene,
As might awaken ſhame in Aretine.
Theſe, and a thouſand follies rank as theſe,
A thouſand faults, ten thouſand fools who pleaſe,
Our pall'd and ſickly taſte, ten thouſand knaves,
Who ſerve our foes as ſpies, and us as ſlaves,

Who

Who by degrees, and unperceiv'd prepare
Our necks for chains which they already wear,
Madly we entertain, at the expence
Of fame, of virtue, taſte, and common ſenſe.

He then inſtances in ſome other vices, concerning which it muſt be confeſſed, that with the ſeverity and weight of Juvenal he alſo partakes of his defects, by expoſing vice in a leſs decent manner than one could wiſh. However, it muſt be confeſſed too to be no eaſy matter not to weaken the ſatire, while we are refining it; and alſo on the other hand, equally difficult too for a poet to reſtrain his juſt indignation on ſuch a ſubject within ſuch due bounds, that the violence of his paſſion ſhall not deprive him of that dextrous exertion of ſtrength, which is more apt to accompany a cool moderation. But here we muſt drop the ſubject.

2. Eſſay on the uſe and effects of the meadow ſaffron. Tranſlated from the Latin of Anthony Storck, M. D. 1s. Becket.

3. The travels of his royal highneſs Edward duke of York. 1s. Dixwell.

4. The trials of the priſoners at the aſſizes held at Guildford for the county of Surry, 3d. Sympſon.

5. A defence of the Majority in the houſe of commons. 1s. Wilkie.

6. The doctrine of the Cherubim opened and explained, an ordination ſermon. By John Gill. D. D. 6d. Keith.

7. A diſſertation on the inutility of the amputation of limbs. Tranſlated from the Latin of Mr. Bilguer. 2s. ſewed. Baldwin.

8. Satire. A poem. 1s. Nicoll.

9. Tranſlation of four ſelect tales from Marmontel. Nicoll.

10. Optical eſſays. By B. Martin. 1s. 6d. Martin.

11. An enquiry into the queſtion, whether juries are or are not judges of law as well as of fact. 6d. Wilkie.

12. Antidote to Arianiſm. By J. W. 6d. Biſhop.

13. Philoſophical Tranſactions for the Year 1763. 14s. 6d. ſewed. Davis.

14. Letter to the Public Advertiſer. 1s. Almon.

A CHRONOLOGICAL MEMOIR *of* OCCURRENCES.

For SEPTEMBER, 1764.

FOREIGN AFFAIRS.

RUSSIA.

LEtters from Peterſburgh, of the 11th ult. adviſe, that a terrible fire had happened at Cronſtadt, which had reduced one third of the buildings in that place to aſhes; but happily the ſhipping received no manner of damage.

Peterſburgh, Auguſt 7. Her Imperial Majeſty arrived here on Sunday evening in perfect health. *Lond. Gaz.*

Peterſburgh, Auguſt 17. Her Imperial Majeſty has been indiſpoſed for two or three days laſt paſt. *Lond. Gaz.*

A report having been made to her Imperial Majeſty in relation to the number of foreigners that have been brought into her dominions, the manner in which they have been diſpoſed of, and the expences incurred thereby, orders have been given for doubling the fund aſſigned for this important Undertaking, that it may be more effectually and more extenſively carried into execution.

Letters from Elſineur of the 4th inſt. bring advice, that they had a certain account, that a moſt dreadful fire had happened in the ſhip yard at Revel, which had reduced the Ruſſia ſhipping there to aſhes, and that, by the ſaid terrible calamity, ſome thouſands of men loſt their lives.

DENMARK.

Copenhagan, Sept. 1. The marriage of their royal and moſt ſerene highneſſes, the Princeſs Wilhelmina and the prince of Heſſe, is to be ſolemnized at ſix o'clock this evening, at the palace; and the rejoicings on this occaſion, it is expected, will be continued every day till the 5th of this month. *Lond. Gax.*

Copenhagen, Sept. 4. The nuptials of their royal and moſt ſerene highneſſes, the hereditary prince and princeſs of Heſſe, were ſolemnized on Saturday laſt in the preſence of their Daniſh majeſties and the royal family; all the foreign miniſters by invitation aſſiſted, and afterwards ſupped, in the uſual manner, at the King's table. The city was ſuperbly illuminated, and all ranks of people ſhewed the utmoſt joy on this happy occaſion. Yeſterday the whole court waited on their royal and moſt ſerene highneſſes

highneſſes with compliments of felicitation; and the evening concluded with a ſupper and ball at the prince royal's apartments. This day, being her Daniſh majeſty's birth-day, there will be a ball and ſupper at court; and to-morrow the royal family will return to Fridenſburgh; from whence it is ſaid, the prince and princeſs will ſpeedily ſet out for Hanau. *Lond Gaz.*

NETHERLANDS.

The following advertiſement is in the Hague Gazette of the 31ſt of Auguſt. 'One ——— de St. ———, who ſtiles himſelf a colonel in the ſervice of the king of Great-Britain, having engaged a number of perſons to go to England, upon aſſurances which he gave them, that he was authorized by his Britannick majeſty to promiſe them ſettlements in America, and that they ſhould be carried there at the king's expence: in order to prevent his continuing to impoſe upon the credulity of the public in this reſpect, it is thought proper to advertiſe that the ſaid St. ——— was never authorized, as he pretends, to engage people for thoſe ſettlements nor to make any promiſes on the part of the Britiſh miniſtry.

We learn from Leyden, that a Floriſt there has an aloe in his garden, of the ſpecies termed by botaniſts, Americana ex Vera Cruce Major, the body of which is three feet and a half high, four feet five inches in circumference, and has ſhot forth a ſtalk of thirty-one feet in height, from this ſtalk proceed forty-ſix ſhoots, bearing 7,856 flowers. The whole plant has near 100 leaves, ſome of which are about five feet long, and ſo thick that they can bear the weight of a man upon them without breaking. This aloe began to puſh forth its ſtalk only within theſe two months.

POLAND.

They write from Warſaw, that in the night of the 12th ult. a moſt violent ſtorm happened there, attended with rain, thunder, and lightning, the latter of which penetrated into the church of the holy croſs, by which ſeveral perſons were killed and wounded.

The Sieur de Onis, the Spaniſh reſident to the republick of Poland, ſet out the 18th ult. from Warſaw, by expreſs orders from his court, on his return home.

Warſaw, Aug. 20. All the troops of the crown arrive ſucceſſively at the place aſſigned them near this city by prince Czartoriſki, the grand regimentary. Thoſe of Ruſſia, who are diſperſed in Lithuania and Poliſh Ruſſia, are now aſſembled within three or four miles of the city: they cannot come nearer our walls, becauſe by the conſtitutions of the ſtate, a king cannot be elected in the preſence of any foreign troops.

The regalia of Poland arrived at Warſaw the 22d ult. from Cracow. They were brought in a waggon covered with ſcarlet cloth, which was preceded by a detachment of the horſe guards, and followed by the biſhop of Culm, the Caſtellan of Oſwiczim, an the crown-guards. On the Saturday following they were expoſed to public view in the caſtle of Warſaw.

Advices from Poland of the 26th ult. ſay, that prince Radzivil had been judicially deprived of his dignity as palatine; and by the ſame ſentence, his creditors are allowed to take poſſeſſion of his eſtates. The princeſs Radzivil, and count Malachowſki, it is ſaid are dead.

Warſaw, Auguſt 29. Prince Radzivil has found means to get into the country of Zips, to count Branicki, great general of the crown: ſo that there is no longer any appearance that thoſe two noblemen will aſſiſt at the approaching election.

The dyet of election was opened the day before yeſterday, and the count Soſnowſki, grand notary of Lithuania, was elected marſhal. This lord having received the ſtaff with the uſual formalities, adjourned the ſeſſion till to-morrow, when ſome precautions will be taken that the election and proclamation may be made with all the order and decorum poſſible.

GERMANY.

An abſtract of the whole body of the Pruſſian laws is now printing at Berlin, by order of his majeſty, which will be compriſed in a middling octavo pocket volume.

Berlin, Auguſt 25. The prince royal of Pruſſia arrived here laſt night from Potzdam, and ſet out early this morning for Sileſia. *Lond Gaz.*

A courier from Peterſburgh paſſed thro' Berlin the 1ſt inſt going to Zerbſt, with the Ruſſian order of St. Catherine, to be preſented to the princeſs of Anhault-Bernburg, Conſort to the prince of Anhault Zerbſt, Brother to the empreſs of Ruſſia.

An earthquake was felt the 16th ult. at Breſlau in Sileſia, but did no damage.

Hanover, Auguſt 28. Yeſterday arrived the nine ſtandards taken from the French cavalry, at the Battle of Minden, Aug. 1, 1759, which have been till this time depoſited at Stade. Six of theſe trophies were taken by the regiments of foot-guards, two by Hardenberg's regiment, and one by Schele's. They were carried to the church of the garriſon by 100 grenadiers of the firſt-mentioned regiment.

They write from Dreſden, that a ſecre-

tary of the marquis de Paulmy d'Argenſon, the French ambaſſador to the republic of Poland, having diſcovered the ſecrets of the embaſſy to the Czartoriſky party, had been hanged up at the Greve as ſoon as the ambaſſador arrived at Paris. The ſecretary was a native of Saxony, and born at Dreſden.

Extract of a Letter from Dreſden, Sept. 1.

'The hereditary prince of Brunſwick, and his brother prince William, arrived here lately, after viſiting all the fields of battle which lay in their route. The whole electoral court received them with a noble affability; they were at ſeveral ſumptuous entertainments, at the French comedy, and at the concerts; they went to ſee the celebrated galleries of Zwinger; and going afterwards to Maxen with our adminiſtrator general, there viewed the famous field of battle where the Pruſſian general Finck, Wuntſch, and Rebentiſch, were made priſoners by the Auſtrians in 1759. Their ſerene highneſſes likewiſe examined the fortified camp which the Saxons occupied in 1756."

Vienna, Auguſt 29. According to advices from Hungary, a body of 30,000 ſpahis (Turkiſh horſe) has actually put itſelf in march from the environs of Belgrade towards Moldavia and Wallachia; ſo that there are at preſent near 60,000 Turks on the confines of Tranſilvania and Poland.

FRANCE.

The king has confirmed, by an edict, the re-eſtabliſhment of the Eaſt-India company, under the new title of compagnie Commercante.

Extract of a Letter from Paris, Auguſt 23.

'Monſ. Van Robais, who carries on a very extenſive woolen manufactory at Abbeville, has lately received a premium of two thouſand livres for fabricating a piece of broad cloth, pronounced by good judges to come the neareſt to that of England, both in fineneſs, texture, and dye, to any hitherto made in France: it is computed he has near 60 tons of Iriſh wool in his ware-houſes for the purpoſes of carrying on this beneficial manufacture.

Extract of a Letter from Paris, Auguſt 27.

'The celebrated philoſopher Hume, who is here with the Engliſh ambaſſador, has, 'tis ſaid, obtained leave of the ſuperior of our Iriſh college to peruſe and make extracts from eleven or twelve volumes in folio of the compoſition of James II. Theſe volumes are all in the hand-writing of that King of Great-Britain, and contain, among a number of intereſting pieces, the copy of a ſecret treaty between Charles II. and one of the greateſt monarchs then reigning in Europe, for the re-eſtabliſhing the Roman Catholick religion in Great-Britain and Ireland, and alſo for dividing between them a neighbouring Proteſtant ſtate of theirs.

They write from Rouen, that on the 9th of laſt month a fire broke out in the church belonging to a convent, by the negligence of ſome plumbers, and the flames made ſo rapid a progreſs, that the church was entirely conſumed: the damage is computed at 400,000 livres.

We hear that two houſes at Havre, three at Dunkirk, two at Rochelle, one at Boulogne, and one at St. Valery, from whence moſt of the Engliſh and Scotch ſmugglers have heretofore been furniſhed with the manufactures and goods of that kingdom, were finally ſhut up laſt month.

Letters from Provence bring advice, that the heats were ſo exceſſive there the beginning of this month, that the wood of Eſtrel, near Cannes, took fire and was reduced to aſhes. That of Montegrand alſo began to kindle, but a favourable wind ariſing, which facilitated the ſuccours brought to it, they were in hopes of being able to extinguiſh it.

The faculty at Paris have at laſt determined the great queſtion relating to inoculation, by a plurality of fifty-two voices againſt twenty-five, in favour of that practice.

SPAIN.

Cadiz, Auguſt 14. A few days ago a dead body was landed here, incloſed in a long ſkin nearly reſemble that of a bear. It was found with ſeveral others of the ſame kind, in ſome caverns in the Canary iſlands, where they are ſuppoſed to have been buried before the conqueſt of thoſe iſlands by John de Betancourt, a Norman, in 1417, and by Peter de Vera, a Spaniard, in 1483. The fleſh of this body, tho' dried, is nevertheleſs preſerved, and is not flexible, but hard as wood, ſo that upon touching the body, it ſeems petrified, tho' it is not. The features of the face are very perfect, and appear to be thoſe of a young man; nor is that, or any other part of the body, decayed: the body is no more ſhrunk than if the perſon had not been dead above two or three days, only the ſkin appears a little ſhrivelled. This body is ſent to Madrid to be depoſited in the Royal Academy of ſurgery. The caſe in which this body was placed, had another ſmall caſe within it, containing two or three Vaſes, and a hand-mill, which were found in the ſame cavern; from

from which it is ſuppoſed it was cuſtomary with the old inhabitants of the Canary Iſlands, to place vaſes in their burial places.

PORTUGAL.

Liſbon, Auguſt 1. The king has approved and confirmed all the military regulations formed by the count de la Lippe; which are going to be collected, and the copies diſtributed to the chief of the regiments, who, as well as the governors and commanders of places, will have orders to ſee them fully executed.

Liſbon, Auguſt 15. By a late accommodation ſettled between the two courts, ſuch Britiſh ſhips of war, and merchantmen, who have any occaſion to touch at St. Salvador, or any other ſettlement in the Brazils, are for the future to be ſupplied with every neceſſary, both in war, victualling and furniture, without meeting with thoſe delays ſo much complained of by Engliſh cruizers touching there in diſtreſs.

Letters from Liſbon adviſe, that they have lately diſcovered heaps of combuſtible matter near ſeveral publick edifices, and the houſes of many of their principal merchants, ſuppoſed to have been lodged in thoſe places with the moſt diabolical intention.

Three large tranſports ſailed from the Tagus the 21ſt of laſt month, with troops and artillery for the iſland of Madeira, which his Portugueſe majeſty is reſolved to render impracticable to all future attempts of the enemy.

ITALY.

Genoa, Auguſt 11. Letters from Corſica ſay, that the rebels continue blocking up St. Florent by ſea and land: and we are further told, that by the ſickneſs raging there, and deſertion which daily increaſes, the place is in want of proviſion, as well as fuel to bake bread.

Leghorn, Auguſt 16. It is now pretended to be known from good authority, that the republick of Genoa has concluded a treaty with France relative to Corſica, which it is ſaid to have been ſigned at Compeigne the 7th inſt. and contains in ſubſtance, 'That the king ſhall ſend ſeven battalions of his troops into Corſica, which ſhall ſtay there four years, and occupy the places alloted for them; which are Baſtia, Saint-Florent, Algagliola, and Ajaccio. That theſe troops ſhall not be engaged in the war, but only be employed in ſecuring to the republic the poſſeſſion of theſe places: that his moſt Chriſtian majeſty ſhall furniſh them their pay, and bread and meat; but the iſland ſhall find them fire, candle, forage, and lodging: that the republick ſhall be at no other expence than the ſtipulated ſubſidy. That in the places which the French troops ſhall occupy there ſhall be no Genoeſe, and that the republick's repreſentatives there ſhall take cognizance only of civil affairs. That if by the preſence of theſe troops in the iſland, peace ſhall be reſtored, the moſt Chriſtian king ſhall be a guarantee to it. That they ſhall he tranſported from France about the end of September, under convoy of two frigates and two xebecks, from Toulon, after which theſe frigates and xebecks ſhall continue to cruize on the coaſt of Corſica till the month of December.

Leghorn, Auguſt 17. This morning a Swediſh ſhip entered this port, coming from Algeir, and having on board the conſul that reſided there on the part of this grand dutchy, who brings the diſagreeable news, that the dey of that Barbary ſtate had declared war againſt the emperor, grand duke of Tuſcany. The reaſon of this haſty rupture is ſaid to be, that a ſhip under Tuſcan colours taken by the Algerines, but releaſed on her being claimed by our conſul, was afterwards found to be a Neapolitan. Letters from different places adviſe, that the ſaid dey is alſo much incenſed againſt the Engliſh and Danes, for their giving paſſports to ſhips of other nations, in order to make them paſs as their own.

Naples, Aug. 11. "There have been thrown into the ſea this week, above the iſle of Capree, about 40,000 tomoli of corn which came from England, and 9000 of that from Holland. A very conſiderable quantity ſtill remains, which will go the ſame way. The malignant fevers continue to make great ravages in this city, as well as in the neighbouring towns and villages, and particularly at Portici; which place, it is ſaid, the king is going to quit, and to retire into the iſland of Procida. According to an account which we are aſſured is very exact, there have died in the capital during the firſt ſix months of this year 19,707 perſons, and only 4493 have been born. The number of deaths in other parts of the kingdom is 116,973, and that of births 9346.

Naples, Aug. 21. The ſickneſs is very much decreaſed within this laſt week, and in all likelihood we ſhall ſoon be entirely freed from this calamity. All public diverſions, which had been interrupted, have been again permitted. *Lond. Gaz.*

Rome, Aug. 22. A kind of putrid and malignant fever rages in this city, ſuppoſed to ariſe from the great ſcarcity which prevailed laſt winter, and the exceſſive heats that have ſucceeded.

Turin, Sept. 8. There is advice from Genoa, that two Genoeſe ſhips, endeavouring to throw ſome ſuccours into St. Firenzo, then cloſely beſieged by the malecontents of

Corſica, were oppoſed in their deſign by four ſhips belonging to the Corſicans; and that after a very ſharp engagement, the two Genoeſe ſhips had taken one of the Corſicans, ſunk another, and obliged the two others to run away; after which they brought their ſuccours into the port of St. Firenzo. *Lond Gaz.*

TURKEY.

Conſtantinople, Aug. 1. We are informed that prince Radzivil, palatine of Wilna, is arrived in Moldavia with a retinue of 1200 men. The porte grants him protection both for his effects and his people, and it is ſaid he propoſes to go to Berlin with a few attendants. Agis Effendi, who reſides in this capital in quality of agent of the kan of the Tartars, was ſent the 19th ult. into Crimea, with diſpatches from the porte for that prince. The Kapigilar Kyaſſi of the grand ſignior had taken the ſame rout but a few hours before; but we are as yet ignorant of the commiſſion with which thoſe officers were charged.

They write from Conſtantinople by way of Vienna, of the 1ſt ult. that the premier ſultaneſs, the favourite of the grand Sultan, died there on the preceding evening very much regretted.

AMERICA.

FROM Jamaica we have advice of the arrival there of major-gen. lord Adam Gordon; and that his excellency governor Johnſtone, of Weſt Florida, was likewiſe arrived there from England, and ſailed for his government. The ſwift ſloop of war was gone down to the bay of Honduras, and all differences with the Spaniards are in a fair way of being accommodated.

In the month of June laſt ſeveral hundred ſlaves were carried off by an epidemical diſtemper at the Havannah, which continued to rage with great violence when the laſt accounts came away.

The laſt letters from South Carolina bring advice, that they are planting a great quantity of mahogany and logwood along the ſavannahs in Georgia, by way of experiment.

New York, Aug. 6. The 20th ult. in the evening, capt. Hunt arrived here from Turk's iſland, in 11 days: he ſays, the French have erected there monuments of 80 feet high one of which is on the Grand Key, and the other on the ſand Key; they are built entirely of ſtone, and the materials were all brought from old France: the 64 gun ſhip, brig, and xebeck, after leaving a few people to keep poſſeſſion of their works, went to cape Francois, and from thence were to proceed for Cape Nicholas, in order to erect ſome ſtrong fortifications on the mole; after which, they gave out, they were to return with ſettlers for Turk's iſland; and that they were fully determined, in caſe of another war, to cut off all ſupplies from the iſland of Jamaica.

IRELAND.

Dublin, Auguſt 20.

THE parliament of this kingdom, which now ſtands prorogued to Tueſday the 21ſt day of this inſtant Auguſt, is farther prorogued to Tueſday the 16th day of April next.

They write from Dublin, that ſuch great improvements are carrying on in that city, that it is thought, that metropolis will ſoon compenſate, by the ſplendor of her buildings, for the inferiority in number of inhabitants to her ſiſter London, and be at leaſt the fineſt city in the Britiſh empire.

COUNTRY.

LAST year the waſps were ſo numerous in ſeveral parts of Hants and Surry, that ſeveral horſes were ſtung to death; and lately an extraordinary affair happened by the ſame inſects; Mr. Spong, a perukemaker at Chertſey, endeavouring to deſtroy a neſt of them, was ſtung in ſo bad a manner, that he lies very ill, and had it not been for the aſſiſtance of the hoſtler at the White-hart inn, he would certainly have been ſtung to death.

Newcaſtle, Sept 1. The following letter, communicated to us, by Mr Green of Preſton, was wrote by Oliver Cromwell to Cardinal

dinal Mazarine, on his refuſing to deliver up Dunkirk, according to the articles agreed upon at the commencement of the war between France and Spain, in which war Oliver was an auxiliary. "Thou traitor, Mazarine, if thou refuſeſt to deliver Dunkirk, into the hands of Lockit, my friend and counſellor, whom I have ſent with full power to receive it, by the eternal G—d I will come and tear thee from thy maſter's boſom, and hang thee at the gates of Paris. O. Cromwell." Upon which the keys were immediately delivered.

The mayor, aldermen, and common-council of the city of Exeter, in chamber aſſembled, the 23d of Auguſt 1764, gave inſtructions to John Tuckfield and John Walter, Eſqrs. repreſentatives in parliament of the ſaid city, relative to an intended farther application of this city to the next ſeſſion of parliament, for the repeal of the new exciſe duty on cyder and perry.

Scarborough, Sept. 11. On the 6th inſt. the freedom of the ancient corporation of Scarborough was preſented to the right hon. the marquis of Granby in a gold box, as a proof of their ſenſe of his glorious exploits in Germany during the laſt war, and of their unmerited obligations to his lordſhip for his particular attachment to that place. His lordſhip, with his accuſtomed generoſity, gave a grand entertainment to the bailiffs and the reſt of the corporation, this day, at which likewiſe were preſent ſeveral of the nobility and gentry that were at the Spa, to the number, in all, of about ſeventy.

L O N D O N.

September 1.

THIS day at noon his royal highneſs the duke of York arrived at his houſe in Pall mall, and immediately waited on his majeſty. His highneſs landed at Dover about nine o'clock this morning.

On Friday the 17th of laſt month, his royal highneſs the duke of York, in conſequence of an expreſs ſent him by his royal highneſs prince William, by Mr. Harper, embarked on board a ſhip from Genoa, and landed Monday the 20th at Nice, in the king of Sardinia's dominions; from whence he proceeded to Antibes, the firſt town from Italy in the French king's dominions; from thence to Carren, Avignon, and ſo to Lions; then thro' the province of Burgundy, and other parts of France, to Calais, an extent in the whole of 1100 miles. His royal highneſs, for reaſons unknown, did not touch at Paris, where grand fireworks and illuminations were intended, and great preparations were made for his reception; the people there expreſſing the greateſt deſire to ſee his royal highneſs. By the above account it appears, he was only 15 days in coming from Genoa to England. He was exactly one year on his travels, as he ſet out from Saville-houſe, Sept. 1, 1763, and arrived at London, Sept. 1, 1764.

3. Yeſterday his royal highneſs the duke of York was at court, and received the compliments of the nobility and foreign miniſters on his ſafe arrival in England.

10. Yeſterday all the foreign ambaſſadors waited on his royal highneſs the duke of York, to compliment him on his ſafe arrival in England.

St. James's Sept. 11. In anſwer to the repreſentations made by his majeſty's ambaſſador at the court of France, demanding immediate ſatisfaction and reparation for the acts of violence committed, on the 1ſt of June laſt, by the commander of a French ſhip of war, in conjunction with other French veſſels, at one of the Turks iſlands, the court of France has diſavowed the ſaid proceeding, has diſclaimed all intention or deſire of conquering the Turks iſland; and has given orders to the comte d'Eſtaing, governor of St. Domingo, to cauſe the ſaid iſland to be immediately abandoned on the part of the French, to reſtore every thing therein to the condition to which it was on the firſt of June laſt, and to make reparation of the damages to which any of his majeſty's ſubjects ſhall be found to have ſuſtained in conſequence of the ſaid proceedings, according to an eſtimate to be forthwith ſettled by the ſaid governor with his majeſty's governor of Jamaica; and a duplicate of the ſaid orders has been delivered to his majeſty's ſaid ambaſſador, who has tranſmitted the ſame to his majeſty's ſecretary of ſtate. *Lond. Gaz.*

12. Yeſterday Braſs Croſbie, Eſq; gave Bond to ſerve the office of ſheriff for the city of London, and county of Middleſex for the year enſuing.

13. The poor German emigrants are to be ſent to South Carolina, and his majeſty has been moſt graciouſly pleaſed to ſignify to the gentlemen of the committee, that his governor of that province ſhall have proper orders to receive and protect them. They are to have proper ſtands of arms, &c. and this day the gentlemen met at Batſon's to conſider of ways and means accordingly.

St.

St. James's, Sept. 15. The damages done to an Engliſh merchant ſhip, which was, by miſtake, attacked in May laſt by the commodore of ſome Spaniſh Xebeques cruiſing againſt the Algerines in the Mediterranean, were immediately repaired out of the Spaniſh Arſenal at Carthagena: and, in conſequence of the repreſentations made on that ſubject by his majeſty's ambaſſador at the court of Madrid, his Catholick majeſty has given orders for defraying the expence of the cure of the Engliſh who were wounded in that attack, for indemnifying the Engliſh captain for the loſs of time occaſioned thereby, and for giving a gratification to the paſſenger, who unfortunately loſt his arm by a ſhot from the Sqaniſh Xebeque. *Lond. Gaz.*

17. On Saturday, about eleven o'clock, the different proprietors of the new invented preſervatives againſt drowning met at Black-Friars to convince the public of the utility of their inventions, and after ſettling ſome diſputes, it was agreed to try them at London-Bridge, at which time there was a conſiderable fall, accordingly, two men with cork jackets went thro' erect without uſing their arms or legs, one of them having a drawn cutlaſs in his hand; then two men and a woman with a mob cap on and red ribbands, dreſſed in air jackets, went likewiſe thro', and were followed by two men with the marine collar and belt: they continued dancing in the eddy a conſiderable time, to the no ſmall diverſion of thouſands of ſpectators, who ſurrounded them in boats. One of the men in an air jacket preſented the ladies with apples, regailed himſelf with bread and cheeſe, &c. after which he fired a piſtol: theſe things were contained in his cap made on purpoſe. Upon the whole it was a droll and not indecent ſight, they all being dreſſed in flannel ſhifts and linen breeches.

Yeſterday morning a little before five, all that part of the beautiful ſcaffold, erected for the taking down and rebuilding of the ſpire of St. Bride's Church, which ſtood above the ſtone work (half the ſpire being taken down) was blown down by the violence of the wind; but what makes it very remarkable is, ſo ſtrong was its conſtructure, that not one of the ropes gave way, but the timbers, though all new, ſnapt off juſt in the middle. In the falling of the timbers, they damaged a houſe or two in the North Paſſage of the Church, and knocked off the two balls of the North Weſt Gate of the church.

18. On Tueſday laſt was held a board for determining the merits of the three different methods for diſcovering the longitude; when the proprietor of the marine chair endeavoured to refute the aſſertions of a gentleman whoſe opinion he thought did not do juſtice to his chair. Another gentleman, who ſpoke with great candour of all the three methods, acknowledged, that obſervations may be made with greater certainty in, than out of, the marine chair; but expreſſed his apprehenſions as to the aſcertaining the longitude at ſea by it, were the ſatellite Theory perfect enough to do it, which he ſeemed to doubt. The Lunar method was acknowledged by the gentlemen to anſwer very well, but they objected to the tedious calculation attending it; to obviate which, Mr. Witchell, a gentleman well known for his ſkill in aſtronomical calculations, preſented to that honourable board a method, by which it may be reduced to a ſingle proportion by Logarithms, and conſequently as ſimple as can be deſired. With regard to Mr. Harriſon's time keeper, it will be ſufficent to obſerve, that its merits were found to be ſuch, that the honourable commiſſioners were pleaſed to order him the immediate payment of 1cool.

22. Yeſterday morning, about one o'clock, two higglers carts going from Shacklewell to Epping Market, were attacked in the new road at Leyton by two footpads. The carts having been robbed a few nights before, had then a guard with them for their ſecurity, who ſhot one of the fellows; but the higgler's horſes taking fright at the report of the piſtol, the other narrowly eſcaped.

This being the anniverſary of their majeſties coronation, their majeſties received the compliments of the nobility and gentry at St. James's, on the occaſion.

BIRTHS. The lady of Robert Child, Eſq; banker, at Temple Bar, of a daughter.

The lady of colonel Richard Lambert, of a daughter.——The lady of the right hon. lord Edgcumbe, of a ſon.

MARRIAGES. Richard Nelſon, Eſq; to Miſs Manley, daughter of Richard Manley, Eſq; of Strutton Ground, Weſtminſter.

——The right hon. the earl of Corke, to the hon. miſs courtenay.——The Rev. Dr. Smith head maſter of Weſtminſter ſchool, to miſs Jackſon, of Compton-ſtreet, St. Anns, Mr. Dod, Merchant, of Abchurch Lane to miſs Towers of Threadneedle-ſtreet.——At Cheſea, Nicholas Ferner, Eſq; miſs Meriton of that place, an heireſs 20,000

20,000l. fortune.—Mr. Steel, of London, merchant, to miſs Lawſon of Weſt Mouſley.—Mr. Boſworth, Packer, in Wincheſter-ſtreet, to Mrs. Leake of the Borough.

DEATHS. Griffin Vaughan, Eſq; in the commiſſion of the peace for Surry and Suſſex,——Mr. William Harding, an eminent merchant in the buckram manufactory.——Samuel Clark, Eſq; an eminent merchant in the Old Jewry.——Mr. George Holmes, an eminent dealer in the public funds.—In Spring Gardens the hon. Charles Monſon, Eſq;—At Roehampton in Surry, John Payne, Eſq;—Mr. Lowther, attorney, in Friday-ſtreet.——In Turkey-ſtreet, Endfield, Mrs. Crow, relict of Dr. Crow, phyſician.—At his houſe at Clapham in Surry, in the 81ſt year of his age, that excellent citizen and real patriot, Sir John Barnard, Knt.—Lieut. general Carr.——The Rev. Mr. Nathaniel Bliſs, M. A. and fellow of the Royal Society.——The lady of Edwin Laſcelles, Eſq; member for the county of York.—Sir Will. Hardres, bart.—Mr. Peter Guillemand, an eminent Silk Weaver, in Steward ſtreet, Spitalfields.——Nathaniel Kerſoot, Eſq; one of the Elder Brothers of the Trinity Houſe.——The right hon. lady Fanny Montague, ſecond daughter of the right hon. the earl of Halifax.—The rev. Mr. Benj. Wilſon, vicar of Wakefield and Normanton, and prebendary of York.——Anthony Goodrich, Eſq; Ruſſian merchant in Cannon-ſtreet.—The lady of Sir Thomas Frederick, bart.——Mr. David Robinſon, an eminent wholeſale grocer in Cheapſide.——Mr. Joſeph Guinand, merchant, in Little St. Helens.—Mr. Pyecroft, formerly an eminent brewer in the Minories, and many years deputy of Aldgate Ward.——Charles Fitch, Eſq; one of the commiſſioners of Lieutenancy for this city, and in the commiſſion of the peace for the county of Eſſex; he was an eminent bookſeller in Pater-Noſter-Row.—The right hon. William Cowper, earl Cowper, viſcount Hardwich, lord lieut. and Cuſtos Rotulorum of Hertfordſhire, doctor of laws, and Fellow of the Royal Society.——At Bath, the celebrated Mr. Quin.

ECCLESIASTICAL PREFERMENTS. The Rev. Mr. Weſton, M. A. to be a Prebendary of Durham.—The Rev Daniel Waſter, L L. D. Fellow of all Souls College Oxford, to the vicarage of Lewknor, in the county.—The Rev. Mr. Thomas Barker, to the rectory of Shadwell in the county of Eſſex and dioceſe of London.——The Rev. George Crofts, B. A. to the vicarage of Narborough, in the county of Leiceſter, and dioceſe of York.——The Rev. Mr. Marſhall, to be lecturer of St. Gregory's and St. Mary Magdalen, Old Fiſh-ſtreet.

PROMOTIONS. Nicholas Halhead, Eſq; to be maſter of Greatham Hoſpital, in the county of Durham, worth 500l. per Ann.——Mr. Thomas Bond, to be chief porter of Deptford Yard.

B——KR——TS.

Sept. 1. Auguſtine Taylor, of Aylesford in Kent.——George Goſling, of Cornhill, Hoſier.

4. W. Milner, of Poole, Dorſetſhire, merchant.—Peter Penny, of Knotsford, Cheſhire, Threadmaker.—Earlyſman Sparrow, of new Shoreham, Suſſex, Ship-builder.—George Rowell, late of Fenchurch-ſtreet, London, victualler.

8. Edward Maylam, of Aſhford, Kent, Draper.—Thomas Rock, of Briſtol, merchant.—Thomas Bache, the younger, of Bridgnorth, in the county of Salop, Tanner.—James Fuller, of Mile-End, Middleſex, Bricklayer.

11. Richard Moſeley, jun. of Chicheſter, in Suſſex, linen-draper.

15. Thomas Johnſon, of Store-ſtreet, St. Giles's, Carver.——John Wright, of Manchester, Lancaſhire, Hatmaker.——William Norris, of Bell Alley, Gracechurch Street, London, merchant.—John Lewis Peyer, of Little Moorfields, Merchant.

18. James Philip, of Reading, Berks, Timber merchant.—Richard Palthorp, of Barking, Eſſex, victualler.—William Mills, of Hempnall, Norfolk, Grocer.—Abraham Parkin, of Workington, in Cumberland, horſe dealer.

22. James Paterſon the younger, of St. George the Martyr, Middleſex, Turner.

BILL *of Mortality from* Aug. 21. *to* Sept. 25.

Buried,		Chriſtened,	
Males — 1154 / Females 1216	2370	Males — 804 / Females 774	1578
Under 2 years old	967	Buried,	
Between 2 and 5	176	Within the Walls	167
5 and 10 ——	103	Without ——	581
10 and 20 ——	80	*Midd.* and *Surry*	1213
20 and 30 ——	194	City & Sub. *Weſt.*	409
30 and 40 ——	210		
40 and 50 ——	202		2370
50 and 60 ——	147		
60 and 70 ——	157	Weekly, *Aug.* 28.	475
70 and 80 ——	109	*Sept.* 4.	457
80 and 90 ——	29	11.	434
90 and 100 ——	6	18.	486
100 and 109 ——	0	25.	468
	2370		2370

Each Day's Price of STOCKS, &c.

Sept.	BANK Stock.	In. Stock.	South Sea	3 per Cent Old Ann.	Dit. New Ann.	3 per C. B. A. redu'd	Ditto consol.	Ditto 1726.	Ditto 1751.	3 per C. India An.	3½ B. An. 1756.	Ditto 1758.	India Bon l. s. d.	Wind at Deal.	Weather at Lond.
30	113½	147		82⅜		83⅛	83⅛			81¼		87½	2 1 0	N E	fine
31	Do	146½			81⅜	83¼	83		80¾		85½		2 0 0	N N W	Do
1	Do			83½		83½	Do			81⅛		87⅜	Do	Do	Do
2	Sunday.													E N E	Do
3		147			81½	83⅜	Do						1 19 0	Do	Do
4					81⅛	83	82⅝						1 15 0	N E	rain
5	113¼				Do	Do	Do				85⅜		1 13 0	N	fine
6	Do	146½		82¼	81⅜	83⅛	82⅞			81		87⅛	1 15 0	N N W	Do
7	113⅛	Do			81¼	83	82¾		80¾		85¾		1 16 0	E	Do
8	Do	Do	92	82⅛		Do	Do			81⅛		87	1 19 0	E b N	Do
9	Sunday.													E	cloudy
10	113⅛	Do		82¼	81⅜	83⅛	Do	80½					Do	N E	fine
11				82⅛		83	Do			81⅛		87	1 18 0	E S E	Do
12	113¼	146¼			81⅜	83⅛	Do		80⅞		84¾	87⅛	2 0 0	Do	rain
13	Do	146½		82¼		Do	Do			81⅛		87	Do	W S W	fine
14	Do	146¼			81⅜	Do	Do		80⅞		85		Do	S W	rain
15	113⅛	146		82⅜		Do	Do					87	Do	W S W	Do
16	Sunday.													S W	Do
17	113⅛	Do			81½	83¼	82⅞	80¾					2 1 0	W	Do
18	Do			82½		83⅜	83					87½	Do	W N W	fine
19	113¼					83½	83⅛						1 19 0	N	Do
20	113⅛			82⅝	81¾	Do	83¼	81				87½	2 0 0	N W	Do
21	113⅞	146			82	83⅝	Do	81⅜	81¼		85¾	87⅞	2 1 0	S W	Do
22				82		83⅜	82⅞	80¾					2 3 0	Do	Do
23	Sunday.													N N W	Do
24						Do	83						2 2 0	Do	Do
25				82¼		83	82⅝					87¼	2 3 0	N E	Do
26		145		82⅛	81⅜	83⅛	82¾		80¾		85½		2 4 0	W N W	Do
27				82¼		83	Do	80¾				87¼	2 1 0		Do
28	119				81½	83⅛	82⅞		81⅛		85½				Do

London: The Peck Loaf to weigh 17 lb. 6 Oz. 0 Dr. Wheaten, to be sold for 2s. 2d. ½

A Map of the Real Passage of the Moon's Shadow over England &c. in the Great Solar Eclipse on April 1.st 1764.

Minutes of Time from London.
SCOTLAND
THE GERMAN OCEAN
THE IRISH SEA
IRELAND
NORTH SEA
WALES
ST. GEORGES CHANNEL
THE CHANNEL
HOLLAND
FLANDERS
NORMANDY
BRETAGNE
FRANCE
Berwick
Thomastown
Ardmillen
Carltown
Mull of Cantire
Ballintoy
Castleton
Morpeth
Newcastle
Durham
Wigtown
Dumfreis
Annand
Kircubright
Lochna
Whithorn
Carlisle
Penrith
Glendrin
Carickfergus
Belfast
Mull of Galloway
Solway Firth
Brampton
Hexham
Darlington
Bernards Castle
Whitby
Scarborough
Flamborough head
Ayre Point
Strangford
Applebey
Orton
Richmond
North Alerton
Thirsk
Aldborough
Bridlington
Peel Castle
I. Man
Douglas
Sodor
Kendall
Kirkby
Rippon
Ripley
Fordlingham
Carlingford
Dundalk
Lancaster
Gisborn
Leeds
York
Houden
Hull
Calf of Man
Clithero
Wakefield
Pontefract
Burton
Spurn head
Drogheda
Bury
Wiggan
Grimsby
I. Angleſey
Doncaster
Manchester
Liverpool
Cairsborough
Louths
Holy head
Beaumaris
Northwich
Sheffield
Lincoln
Horncastle
DUBLIN
Conway
Bangor
Caernarvon
Flint
Denbigh
Chester
Chesterfield
Newark
Wicklow
Wrexham
Namptwich
Asborn
Derby
Nottingham
Beſton
The Wash
Wells
Harlegh
Bald
Wem
Uttoxeter
Grantham
Sleaford
Cromer
Braychipuli P.t
Stafford
Litchfield
Louthborough
Lynn
Yarmouth
Salop
Tamworth
Leicester
Oakham
Downham
Norwich
Montgomery
Bridgenorth
Stamford
Thorney
Aberistwith
Peterborough
Thetford
Ludlow
Bendley
Coventry
Grundle
Ely
Eye
Radnor
Worcester
Warwick
Huntingdon
St Ives
Wexford
Leiceſter
Daventry
S.t Edmundsbury
Ipswich
Cardigan
Northampton
Cambridge
Clare
Shipton
Bedford
Hereford
Eſsom
Banbury
Saffron Walden
Lewksbury
Buckingham
Dunſtable
Brunswick
Colchester
Brecknock
Islip
Oxford
Caermarthen
Monmouth
Gloucester
Stroud
Bisford
Aylsbury
St Albans
Chelmsford
Haverfordwest
St Brides Bay
Milford Haven
St Govans P.t
Tenby
Usko
Cirencester
Abingdon
Henly
Maidenhead
LONDON
Brentford
Gravesend
Rochester
Cardiff
Bristol
Swindon
Marlborough
Windsor
Wormshead
Bath
Reading
Epsom
Guilford
Tunbridge
Lundy I.O
Wells
Devizes
Newbery
Farnham
Godalming
Hartland P.t
Bridgwater
Briston
Andover
Salisbury
Winchester
Horsham
Barnſtaple
Somerton
Shaftsbury
Petersfield
Biddiford
Stratton
Taunton
Ilchester
Granborn
Southampton
Chichester
Lewes
Sheepwash
Exeter
Middleton
Christ Church
Arundel
Oakhampton
Dorchester
Pool
Lyme
Weymouth
Lancelton
Tavistock
Bodmin
Padſtow
Powerel P.t
Portland bill
Selsey bill
Dunnoze
Michel
Truro
Bay
Plimouth
Dartmouth
Tor Bay
C. Cornwal
St Ives
Bazancy
Falmouth
Start P.t
Lands End
Pelyan
Eddistone Lightehouse
Scilly I.s
Lizard
Guernsey I.
Alderney
Sark
Jerley I.
C. la Hague
Barfleur
Cherburg
Hogue
Caen
Coutan
Tregnier
St Paul de Leon
St Brieu
St Malo
I. Ushant
Breſt
Quimper
Blavet
Vennes
Rennes
Nantes
Orleans
Paris
Verdun
Chalons
Troyes
Chartres
Mayence
Antwerp
Tournay
Cambray
Namur
Liege
Brussels
Ghent
Bruges
Dunkirk
Ostend
Sluys
Middleburgh
Flushing
Rotterdam
Delft
Dort
Leyden
Amsterdam
Harlem
Utrecht
Arnheim
Nimeguen
Zutphen
Deventer
Groningen
Embden
Lingen
Munster
Osnabrug
Minden
Hanover
Brunswick
Magdeburg
Hamburg
Lubeck
Bremen
Oldenburg
Wesel
Cologne
Bonn
Coblentz
Mentz
Spire
Worms
Manheim
Philipsburg
Landau
Strasburg
Metz
Thionville
Luxemburg
Namur
Liege
Maestricht
Aix la Chapelle
Juliers
Dusseldorp
Embden

The GENERAL MAGAZINE,

For *OCTOBER*, 1764.

An account of the late remarkable eclipſe of the ſun, which happened April *the 1ſt*, 1764: *with a map of the real paſſage of the ſhadow over* England.

By G. WITCHELL, *teacher of the mathematics.*

AS I ſometime ſince publiſhed a map of the paſſage of the moon's ſhadow over *England* and the parts adjacent, it may, perhaps, be not improper to give ſome account of the real paſſage of the ſhadow, from ſuch obſervations as I could procure.

The unfavourableneſs of the weather, unhappily, prevented the eclipſe from being obſerved at thoſe places, on the continent, over which the center of the annular penumbra paſſed: and the like misfortune, ſeems to have attended thoſe which lay in the rout of the eaſtern limit, as I have not been able to learn that any obſervations have been taken where the upper limbs of the ſun and moon appeared in contact. In *England* we had not much better fortune, in ſome places the clouds obſcured the ſun ſoon after the middle of the eclipſe, ſo that only the beginning, and ſome few phaſes, could be obſerved: this was the caſe both at *Greenwich* and *London*; but at *Oxford*, *Chatham*, *Ipſwich*, *Liverpool*, *Newcaſtle*, *Derby*, *Edinburgh*, and ſome other places, the eclipſe was obſerved from beginning to end.

By comparing theſe obſervations together, it appears that the weſtern limit entered *England* near *Newhaven* in *Suſſex*, leaving *Brightelmſtone* and *Lewes* a little to the weſt, thence croſſing part of *Kent* it paſſed over *Rocheſter* and the mouth of the *Thames* a little to the eaſt of *Graveſend*; then entering *Eſſex*, it left *Malden* to the weſt and paſſed nearly over *Colcheſter*, perhaps a little to the eaſtward of it, and, leaving *Harwich* to the eaſt, directed its courſe toward *Ipſwich*, at which place the eclipſe was obſerved to continue annular only fifteen ſeconds: then leaving *Dunwich* to the eaſt and *Eye* to the weſt, it paſſed between *Norwich* and *Yarmouth*, quitting *England* near *Wintertonneſs*.

From this account it appears, that my former map deviated but a very ſmall matter from the truth; for in that, the weſtern limit paſſes over *Tunbridge* and *Graveſend*, or about ſix miles more weſt than it really did, a difference ſo trifling hardly deſerves an inquiry, whether it was owing to my aſſuming the ratio of the earth's diameters too large, or that the tables gave the moon's latitude ſomething too great.

I am, indeed, inclined to believe, that it was owing to the firſt of theſe cauſes; for I ſuppoſed the diameters of the earth to be to each other as 178 to 179, agreeable to the determination of the *French* academicians who meaſured the length of a degree under the arctic circle, whereas it appears by later obſervations, that the figure of the earth approaches nearer to a ſphere, and that the ratio of its diameters is nearly as 215 to 216.

It appears from the calculation of this eclipſe, that the deviation of the figure of the earth from that of a ſphere, will produce a very conſiderable effect, with reſpect to the paſſage of the ſhadow, no leſs (in this example) than thirty-two geographical miles, by which means, if the calculation had been made in the uſual manner, the limit, inſtead of paſſing over *Rocheſter*, would have ſcarce reached *Canterbury*, and the eclipſe would not have been annular in any part of *Eſſex*, *Suffolk*, or *Norfolk*; it is therefore abſolutely neceſſary to have regard to the ſpheroidal figure of the earth in the calculation of ſolar eclipſes, and, as I do not know that any author has given ſufficient precepts for that purpoſe, I intend to treat particularly upon it, in a treatiſe, which I am now publiſhing by ſubſcription.* The reverend Mr. *Hornſby*, Savilian Profeſſor of Aſtronomy at the Univerſity of *Oxford*, having obſerved both the beginning and end of the eclipſe with great accuracy, was pleaſed to favour me with his obſervation: this I compared with a calculation which I had previouſly made for that place, and found, that the duration of the eclipſe, as given by the tables, was 1′ 33″ too long, the beginning being 1′ 54″ and the end 0′ 21″ too ſoon, from whence I concluded, the error in longitude, both of the ſun and moon, did not exceed 40″, and as in all probability ſome part of this, was due to the ſolar tables, it follows that the lunar tables, which I made uſe of, are very near the truth.

On the Laws *of* England.

To the Editors of the General Magazine.

THE learned *Fleetwood*'s judgment concerning the publication of ſo many *abridgments*, being well worth reading, I have been at the trouble of tranſlating his preface to the table he compoſed to the laſt volume of the year books, wherein will be found his thoughts on that ſubject. I wiſh ſome of your correſpondents would give ſome account of the learned ſages in the law, mentioned in this preface, as alſo of *Fleetwood* himſelf, I dare ſay they would prove agreeable to many of your readers, as much as to

Yours, &c. A. Z.

To the moſt excellent and illuſtrious Thomas Bromley, *lord high chancellor of* England, *one of the privy councel to her moſt ſerene majeſty queen* Elizabeth, William Fleetwood *Recorder of* London, *wiſheth health.*

ERASMUS, with me, moſt noble lord, in the higheſt eſteem, the chief ornament of learning in the preſent age, aſſerts, that it is the eaſieſt thing to write proverbs; but to make ſelect collections, and to write well, is very difficult, and requires an unwearied diligence, much time, and infinite labour; I can now affirm the ſame thing of this inaccurate trifling treatiſe of mine: I ſuffered more fatigue, labour, and trouble in reducing it to a ſhort narrow compaſs, than if I had treated it more at large. I offer this for as perfect a table as I am able to compile, not only to the year books of king *Edward* the *fifth*, *Richard* the *third*, and *Henry* the *ſeventh*, but alſo to *Henry* the *eighth*. The reaſon of my making a ſeparate index to the years of *Henry* the *eighth*, was not to diſtinguiſh it from the regiſters of the former kings.

* See Mr. Witchell's Advertiſement in this, and the two laſt Numbers.

kings, for the arguments appeared to me too cogent when I more diligently examined the years or annals of *Henry* the *eighth*, neither would the dignity of the ſubject, or the duty of a prudent and judicious writer admit of it; on the contrary I found the proceedings of thoſe three former kings truly ſtated, and the arguments on both ſides the queſtion judiciouſly taken; things in themſelves of great weight, moſt worthy and neceſſary to be known. But when I undertook this trifling work (moſt honoured Sir) my chief and only reaſon was, that within theſe five years now laſt paſt (which every body is ſenſible of from experience) that abridgment, the produce of the great diligence, and deep ſtudy of that honoured luminary Sir *Robert* * *Brooke*, knight, was firſt publiſhed, which book (with candor I confeſs it) is full of variety of caſes, and very well abridged, but the mind of the ſtudents of our municipal law has been ſo allured ever ſince, that the uſual method of ſtudy, and the having recourſe to theſe matters as it were by the longer clue of ancient writers are entirely forgot, they now conſume their whole time in indefatigably labouring at the notes in the abridgment of the illuſtrious lord *Brooke*. Which indeed (in my opinion) as it has already given a deep wound to the ſtudents, ſo (believe me) it will ſoon occaſion the like ſlaughter to all thoſe who ſhall hereafter ſeek a perfect knowledge of the laws of this kingdom. But I do not find the reaſon why your greater abridgment of Sir *Anthony Fitzherbert*, knight, (eſpecially as it is ſet off with variety of ſentences) ſhould be held in no eſteem, or why it ſhould not be preferred to later ones, unleſs becauſe the former is exceeded by the latter, in 391 number of titles, ſince *Fitzherbert* finiſhes his book with only 262 titles; and *Brooke* his with 653. Hence it is that the honourable ſociety of the ſtudents of the law allured by variety of matter, and captivated with an eaſier method of finding things out, is more pleaſed with the latter book, ingeniouſly enough compoſed, than with the former very learned and laboured one. In order therefore that theſe honourable youths may be drawn from this modern prepoſterous method of ſtudy (which if they continue in any longer I much fear that not only their judgment will be foreſtalled, but likewiſe their memory, the treaſury, and as it were the repoſitory for every thing, will be abſolutely deſtroyed.) I deviſed this ſmall regiſter, that every ſtudent in the law, aſſiſted as it were with the clue of *Theſeus*, might with the greateſt eaſe, be directed to the copious matter with he is in ſearch of, and deſirous of being ſupplied with. I choſe theſe years principally, becauſe they contain the chief of the commentaries of *Edmund Plowden*, that learned ornament of the law, as alſo lay down the effect of the body of the law in concluſions of daily practice. Now I will give my opinion of abridgments, while I diligently inveſtigate the monuments of learning in times paſt, and I ſee this, which the reſt of mankind muſt alſo confeſs, namely, that the juſtices or ſerjeants at law (as appears in the *fortieth* of *Edward* the *third*) were moſt learned, and yet they did not at that time of day ever make uſe of public abridgments. But whoever weighs and conſiders the judgments in *Henry* the *fourth's* time, will find them eſtabliſhed on the ſure foundation of

* Mr. Juſtice *Foſter* ſays *Brooke* is perhaps the moſt judicious of all the abridgers. *F. 8. C. Law*, 366.

the law; ſo that neither I, nor any one elſe can prove, that they were benefitted by the uſe of any common abridgment, but what belongs to thoſe moſt learned and ſtudious ones in the *thirtieth* of *Henry* the *ſixth*, and alſo in the time of *Henry* the *ſeventh*, of what extraordinary capacity, and profound knowledge they were, (wholly deſtitute of thoſe ſort of abridgments, nor did they ſtand in need of their aſſiſtance) I leave to your own judgment, moſt upright judge. I have obſerved in turning over divers volumes, that there muſt have happened formerly, at different times, a vaſt ſhipwreck to the fleet of learning from thoſe many dangerous rocks, *abridgments*. For we read in the *ſecond* chapter of the *ſecond* book of *Maccabees*, *v.* 23, *&c.* That *Jaſon* of *Cyrene* wrote five hiſtorical books, which were all loſt, becauſe the perſon who had abridged the books of *Maccabeus*, comprized in one volume only, which were before contained in five books. All the works of *Trogus*, the greateſt part of *Titus Livy*, *Pomp. Feſtus*'s dictionary, as alſo ſome volumes of the civil law, with many learned books of the ſame ſort, have been totally loſt by abſtracts or abridgments. For which reaſons I the more condemn that compendious and too ancient method of writing, and ſtudying as well by thoſe more advanced in years, as by younger perſons. Abridgments are chiefly moſt * beneficial and profitable to him who firſt compiles them, but are injurious to almoſt all others, who are deſirous by this means to uſe, or rather abuſe, the induſtry of others. This jejune and dry ſort of ſtudy, takes a pleaſure in pouring over theſe epitomes, nor is it very unlike the labor of poor lazy people, who being ignorant of ſowing, plowing, harrowing, and reaping, ſteal the grain out of other perſons fields, but the barns of thoſe ſorry wretches, when hunger pinches them in hard times, are quite empty of the fruits of the earth. You have now, illuſtrious lord, and head of the law, my opinion of this new and too conciſe method of ſtudying the law in this kingdom; which I hope will have ſo much weight with the honourable and famous ſtudents of the law, and in whom I muſt delight, that they will now, from my advice, have no objection to tread in the footſteps of their predeceſſors, in which they have ſo long gone before them. I fervently beſeech God to preſerve you and all your's, and to bleſs and furniſh you moſt bountifully with all kind of good things, by the inſpiration of his holy Spirit, ſo that you may be moſt uſeful, and long preſerved to your country, the ſtate, and church. Farewell.

London, *from* Bacon *Houſe*, 10 September, *in the year* 1597.

To the Compiler of the Law Part of the General Magazine.

Illegal Commitment of a Player upon the vagrant Act.

SIR,

THE defendant having been brought up by *Habeas Corpus*, the ſubſtance of the commitment appeared to be in the manner following; "To the keeper of the houſe of correction for the city and liberty of *Weſtminſter*. Whereas *John Harper* has been brought before me, one of his majeſty's juſtices of the peace for the county of *Middleſex*

* My lord *Coke* ſays, "he once intended for the eaſe of the ſtudent to have made a table to the inſtitutes, but when he conſidered that tables and abridgments were moſt profitable to them that made them, he left that work to every ſtudious reader." *Co. Lit.* 395.

ſex and city and liberty of *Weſtminſter*, and oath has been made by two credible witneſſes that the ſaid *John Harper* is a common player of interludes, without the king's licence, in the pariſh of *St. Martin's in the Fields* in the county of *Middleſex* and city and liberty of *Weſtminſter*. And whereas it appears to me upon examination of the ſaid *John Harper* upon oath, that the ſaid *John Harper* has not any viſible way of livelyhood, but is a common player of interludes. I do hereby adjudge the ſaid *John Harper* to be a rogue and a vagabond, in purſuance of the ſtatue in that caſe made and provided. Theſe are therefore in his majeſty's name to require you to take into your cuſtody the body of the ſaid *John Harper*, and to keep him to hard labour till the firſt day of the ſeſſions to be next holden for the city and liberty of *Weſtminſter*. *Thomas Clarges*, Mr. **Abney* and ſeveral others were council for the defendant, and upon this return they moved that he might be diſcharged, they ſubmitted it, that the warrant on which the defendant was committed, was a conviction; by reaſon of thoſe words in it, I do adjudge. And if ſo, it was clearly bad for want of the evidence being ſet out in it. But if it ſhould not be conſidered as a conviction; *at leaſt it was a commitment in execution, and upon ſuch commitment the defendant is not bailable*; for which reaſon there ought to be as much certainty it, as in a conviction. But ſuppoſing it to be only a bare commitment, yet there were ſuch exceptions to the form of it, as that the defendant ought to be diſcharged. The ſtatute upon which it is founded, is 12 † *Ann. ſt.* 2. *c.* 23. And by that ſtatute ſuch juſtice only as lives near the place where the fact is committed, has a juriſdiction over the cauſe; but nothing of this is ſet forth in the preſent commitment. The ſecond ſection of this ſtatute requires too, that the complaint ſhould be made by a conſtable or other inhabitant; but in the commitment it is no where ſet out on whoſe complaint it was founded. It is not ſet out neither, before whom the oath was taken, which the two witneſſes made. The time when the fact was done is not ſpecified; and it does not appear, that that part of the pariſh of *St. Martin's in the Fields*, in which the fact was done, was not within the city or liberty of *Weſtminſter*.

* Afterwards Sir *Thomas Abney*, and one of the juſtices of the *Common Pleas*. He died of the goal diſtemper at the *Old Bailey* ſeſſions in *April* 1750.

Mr. Juſtice *Abney* (ſays the late Mr. Juſtice *Foſter*) of whom I can ſpeak from a long and intimate acquaintaince with him, was a very worthy man, learned in his profeſſion, and of great integrity.

His zeal for the intereſt of his country, which he well underſtood, begat in him a ſtrong and early attachment to his majeſty and his royal houſe; which was, if I may be allowed the expreſſion, his *ruling paſſion* to the day of his death.

He was, through an openneſs of temper, or the pride of virtue habitual to him, incapable of recommending himſelf by that kind of low aſſiduous craft, by which we have known ſome unworthy men make their way to the favour of the great.

However, his merit was not overlooked. He was firſt appointed attorney-general of the *Dutchy* and one of his majeſty's learned council: then ſteward of the Palace Court; afterwards a baron of the *Exchequer*; and laſt of all, one of the juſtices of the *Common Pleas*.

In his judicial capacity he conſtantly paid a religious regard to the merits of the queſtion, in the light the caſe appeared to him: and his judgment very ſeldom miſled him.

In ſhort when he died, the world loſt a very valuable man, his majeſty an excellent ſubject, and the public a faithful able ſervant.

Nec me meminiſſe pigebit. *Foſt.* Cr. Law. 75, 76.

† This ſtatute is now repealed by 13 *Geo.* 2. *c.* 24. See 17 *Geo.* 2. *c.* 5. *ſec.* 34.

minſter. The time too for which the defendant is committed, is likewiſe uncertain; for *non conſtat* when the ſeſſions for the city and liberty will be held; whereas the ſeſſions for the county at large is ſettled by act of parliament. The defendant's council then excepted even to the ſubſtance of the commitment, and ſubmitted it, that he was not within the words or intention of the act, by reaſon that it was not pretended he was a vagrant. And it appears by the whole complection of this act, that vagrancy is neceſſary to make the perſons ſpecified in the act, offenders within it. They conceived likewiſe, that ſtage players and comedians do not fall within the deſcription of any of the perſons ſpecified in the act, and it was well known, that the defendant was a ſtage player and comedian, and one that acted too with great reputation. They ſubmitted it, that ſuch perſons could by no means be comprized under thoſe words in the act, *common players of interludes*. They could by no means be underſtood by the act to be declared rogues and vagabonds; if they were, even his majeſty's licence to the Theatre Royal would hardly be found to be legal. The court were of opinion that this was not to be conſidered as a conviction; but yet they inclined to think that the warrant was bad; becauſe it was not ſet forth in it that the defendant was a vagrant. However that the parties might have an opportunity of agreeing to try the merits of this queſtion in a feigned iſſue, it was conſented to on all ſides, that the defendant ſhould be diſcharged out of cuſtody, upon his own recognizance to appear in court the laſt day of this term. The king and *Harpur*. 2 *Barnard. K. B.* 349.

There has not been ſince the revolution an inſtance of ſo dangerous an act of power as the above commitment of Mr. *Harper* to *Bridewell*. If this commitment is to be adjudged as it is inſiſted on, *a commitment in execution within the meaning of the* Habeas Corpus *act, and therefore not bailable, nor ſubject to the examination of the ſuperiour courts, notwithſtanding the fact upon which the conviction is founded be falſe*; it cannot any longer remain a queſtion with a man of common ſenſe whether the people of *England* are a free people, or whether liberty here is upon any better footing, than it is in the dominion of the grand Seignor, for of what avail is *Magna Charta* to liberty, if an honeſt man, a good ſubject, and a freeholder, ſhall on the vagrant * act be ſent to *Bridewell*, at the pleaſure of a petit juſtice of the peace, or an *Engliſh* Baſhaw? and there kept for ſix weeks or (if it is agreeable to his worſhip's diſcretion) ſix years, for ought I ſee to the contrary, under pretence of his being a vagrant, though he is a perſon of unqueſtionable ability, and perhaps has not ſtirred a mile out of the pariſh where he has a ſettlement within ſeven years. If this ſort of doctrine prevails, I do not doubt but that I ſhall live to ſee wealthy and incorrigible vagrants conveyed to ſave charges in their *own coaches* to the houſe of correction, the workhouſe, or (if the juſtice is charitably inclined) perhaps to an alms-houſe, and if many gentlemen in the commiſſion of the peace (which at preſent ſeems to be the only protection againſt *Bridewell*) ſhould at any time happen to be left out, I doubt much whether they would not be in great danger of a commitment or a whipping, for not being able to paſs an examination

* Stat. 17 Geo. 2. c. 5.

examination touching their ſubſtance and place of abode. The ſtat. 12 *An.* ſt. 2. c. 23. upon which this extraordinary proceeding is grounded, was made apparently with no other view than to prevent thoſe who want ability to maintain themſelves from wandering about the country and becoming chargable to pariſhes where they have no ſettlement, or having wandered from their ſettlements to convey them there again, for all the poſitive direction which is given by the ſtatute is, that any perſon apprehended as a vagrant ſhall be examined touching his condition and circumſtances, and place of abode, or birth; and if the juſtice convict him, he is to be conveyed to the place of his ſettlement in ſuch manner as *other perſons likely to be chargeable to pariſhes are to be ſent.* The ordering a vagrant to be whipt or committed to *Bridewell* is only diſcretionary before the paſs is made. Plays were inſtituted to recommend virtue, and expoſe vice, therefore are not evil in their own nature, and I believe acting of plays is univerſally agreed on by all lawyers to be lawful in itſelf, and although the ſtatute deſcribes common players of interludes as well as fencers, minſtrills, &c. to be rogues and vagabonds, yet ſuch deſcription, unleſs it be attended with the circumſtances of the party's not being able to maintain himſelf, and wandring about to play and fence, &c. does not give the juſtice of peace any juriſdiction; for if a man of ability is to be puniſhed, for what purpoſe does the act of parliament in the very firſt inſtance direct the juſtice to examine into the condition and circumſtances of the party apprehended, or what then can the meaning be of thoſe other words, *that he ſhall be conveyed in ſuch manner as by the laws of this realm other perſons likely to be chargeable to the pariſh are to be ſent:* or if a man is taken in the pariſh where he has a ſettlement, to what place is he to be conveyed? If then a player, being in every other circumſtance an honeſt man, having a ſettlement, paying his debts, being a good ſubject, a good chriſtian, and having the univerſal benevolence of mankind, is notwithſtanding to be whipt or ſent to *Bridewell* at the diſcretion of a juſtice of the peace, the Lord have mercy on him, for he may be ſaid to be truly miſerable; nay we ought not to confine our prayers for mercy on actors only, but on the whole nation, for if ſuch commitments as theſe are to be juſtified, I would fain know the man who having the misfortune to diſoblige a juſtice of the peace can be ſure of not being whipt or ſent to *Bridewell.*

JURISPRUDENS.

An Eſſay to prove That all Inſurances on Ships and Goods, at Sea, beyond the Intereſt of the aſſured, ought to be prohibited. By a Merchant.

Non tenetur Aſſecurator, niſi pro ea quantitate, quam habebat Aſſecuratus in navi deperdita.

Roc. de Aſſecur. not. 10.

THE original deſign of making inſurance on ſhipping was undoubtedly no more, than a general indemnity againſt the perils and dangers of the ſea, and being confined within the bounds of that intention is of great encouragement to trade, and navigation; and in that point of view it has been treated in all countries where commerce

merce has flouriſhed, as a matter of the higheſt importance, and almoſt every where, except in *Great-Britain*, is ſubject to ordonnances, and regulations fixing and aſcertaining the limits thereof.

But the beſt inſtitutions are often liable to be applied to the worſt purpoſes; there is no caſe which affords more inſtances of this kind, than that of inſurances, eſpecially in this country, for there is no other where an inſurance on no intereſt is not prohibited.

The permitting this abſurd ſpecies of inſurance upon no intereſt to gain ground here, hath been the introduction of all thoſe fraudulent practices, by which ſo many ſhips, and cargoes have been wilfully loſt at ſea.

It was about the time of my lord keeper *North*'s holding the great ſeal, that inſurance, intereſt or not, firſt appeared, but then the court of chancery could not conceive upon principle either of law or equity it was, that a recovery of a recompence in damage, for a loſs not ſuſtained could ariſe, and therefore vacated an inſurance, becauſe it appeared that it was made upon no intereſt, but afterwards means were found under ſuggeſtions of advantage to the trade of the nation, to bring the law to acknowledge a validity, and force in that, which, before, was eſteemed abſurd, and nugatory, and thus the policy of inſurance, intereſt or not, became eſtabliſhed.

Soon after this, the making of inſurance vaſtly encreaſed, for gameſters, wagerers, and cunning fellows who pretended to deal in ſpeculation, began to be almoſt as much concerned as the merchants, ſo that a policy of inſurance in a ſhort time acquired rather the effect of a box and dice, than a contract to ſecure trade; and as gameſters ſeldom play fair after a few of the firſt games, it was not long before foul play in aſſurances began to appear, and which has ever ſince continued increaſing, inſomuch that now it is almoſt as common to hear of a wilful and fraudulent, as of an inevitable loſs at ſea.

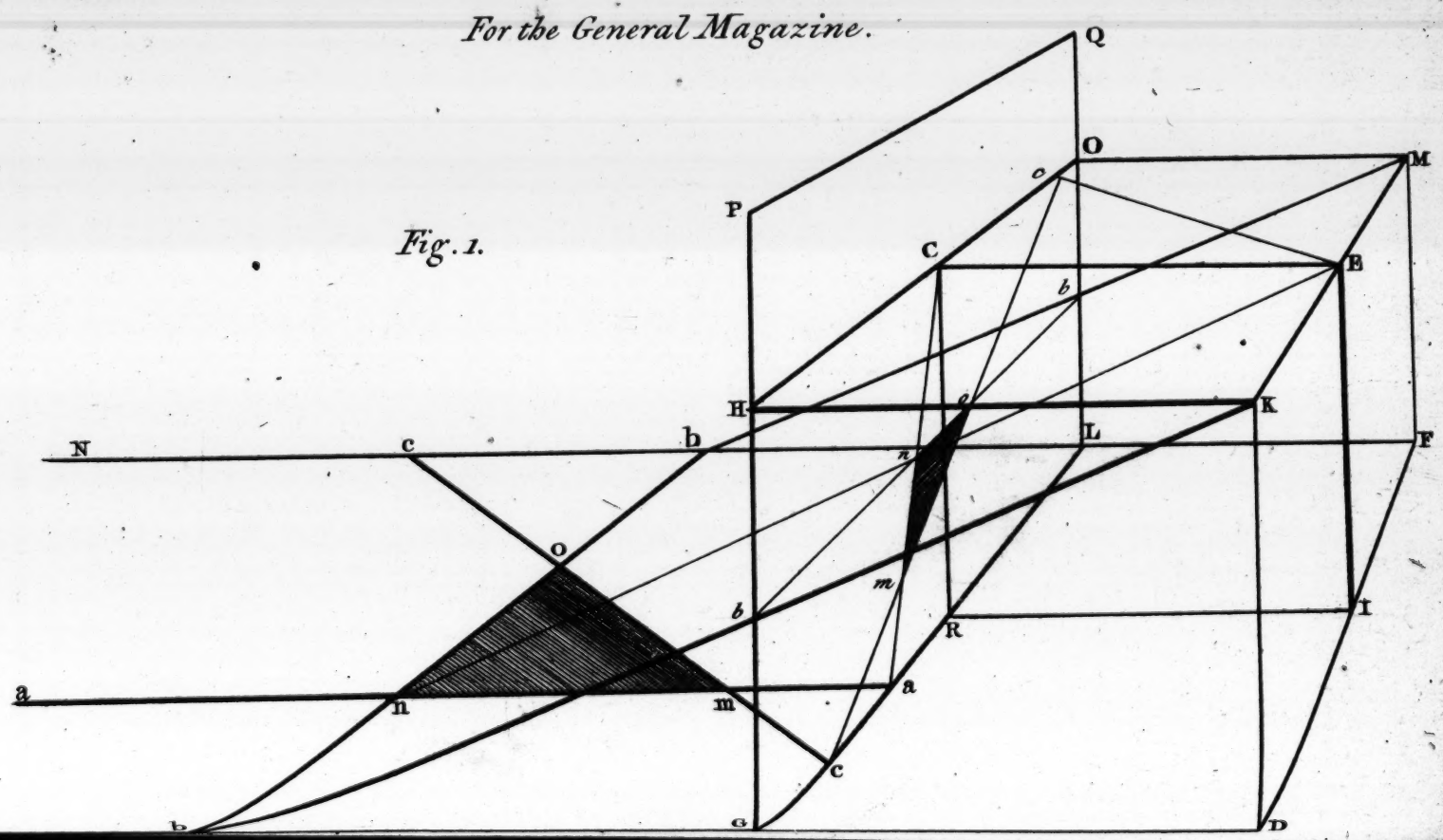
Practice and experience are the great lights of buſineſs, without which it is not known what things may be made to bear; though ſpeculative inſurance under the direction of proper intelligence, and other uſeful helps was become a conſiderable branch, and carried on without employing any other money or ſtock, than this premio of inſurance. Yet experience diſcloſed, that as all thoſe inſurances were to be made, on the ſhips only, the care of a cargo might ſometimes obſtruct the *beneficial* loſs of a ſhip, and keep inſurance upon no intereſt within narrower bounds than otherwiſe it would be, if ways could be found of profiting by the loſs of the cargo, as well as by that of the ſhip, for hitherto inſurance on goods could not be otherwiſe made, than upon their value.

This introduced another new ſpecies of inſurance, called a valued policy, whereby the inſured might value his intereſt at 1000*l.* though it was not really worth ſo many ſhillings, and no other proof was to be required than the production of the policy. So that now by inſuring, intereſt or not, on the ſhip, and valuing the goods at ten times their worth, nothing can happen ſo much to the diſadvantage of the inſured, as the arrival of the ſhip, and cargo, a circumſtance affording ſmall hopes of ſafety in ſuch adventures, but it is the ſtate into which the buſineſs of inſurance is brought by leaving the door of fraud wide open.

For

For the General Magazine.

Fig. 1.



For the frauds of the insured in common estimation are almost equal in risque to any other peril usually insured against, especially in time of war, when colourable captures are easily contrived by entering into confederacies with the enemies of the nation; a practice of which instances appear almost every day; under these circumstances it is, that this great branch of trade, called insurance which had been accounted so valuable, is now esteemed upon the whole, rather a losing, than a beneficial part of business.

The making assurance in such manner *as manifestly interests the party insured in a loss*, is a thing on the first view appearing so dangerous, that one would think it impossible to be endured; it is so far from being tolerated in any other country, that there is no state in Europe where insurance is used, that hath not expressly prohibited the making it beyond the interest of the party under severe penalties, such as confiscation of goods, or corporal punishment, as appears by the ordinances of *Fontainbleau touchant la Marine*, and also those of many other places, and by stat. 19 *Geo.* 2. c. 37. intitled, "An act to regulate insurance on ships belonging to the subjects of *Great Britain*, and on merchandizes or effects laden thereon." It is enacted, that no insurance shall be made after the first of *August*, 1746, on any ship belonging to his majesty, or any of his subjects interest, or no interest, or without further proof of interest than the policy, by which the sense of the legislature here, seems to be declared, that insurances of that nature are unlawful, and ought to be prohibited, but it is conceived that statute is not sufficient effectually to answer the end proposed, though it has gone a good way towards it.

An effectual, and absolute prohibition therefore of all assurance whatsoever upon no interest, or for more than the real interest of the assured, is still wanting, for such a prohibition would manifestly tend to prevent frauds, restore fair dealing, preserve the Marine, encourage insurance, and finally support and maintain trade, and commerce in general.

To the Editors of the General Magazine.

SIR,

HAVING received much improvement from the publications of your ingenious mathematical correspondents, beg leave to inform them that lord chief justice *Holt* said they were *gentlemen* by their profession. 12 *Mod.* 249

An English Lawyer.

To the AUTHOR *of the* GENERAL MAGAZINE.

SIR,

AS you have declared one part of your design to be the laying before the public such original pieces on useful and curious subjects as may be handed you, I have taken the liberty of enclosing the first paper of an essay on the theory and practice of perspective, conducted on the principles of Dr. Brook Taylor, which, if on perusal, you think worthy a place in your entertaining collection, the whole shall be at your service; it will consist of about ten such papers as the inclosed, each containing a distinct part of the subject. ——— As I have purposely avoided mathematical demonstrations, the figures are drawn in such a manner as to make the propositions

poſitions as evident as poſſible by inſpection, it will be neceſſary, therefore, to have them engraved accurately after the drawings, which I have taken care to proportion ſo as to agree with the ſize of the book. By ſignifying your approbation hereof in the next magazine, I will take care to ſupply you from time to time with the papers and drawings ſo as to be regularly inſerted every month 'till the whole is finiſhed.

I am, Sir, your humble ſervant.

Halifax, Aug. 17, 1764.

J. PRIESTLEY.

An ESSAY *on the* THEORY *of* PERSPECTIVE, *with* Practical Rules *deduced.*

ART. 1. IN order to give an idea of the ſubject, ſuppoſe a perſon placed in a room, directly before a window which opened to a large extenſive country, and viewing the different objects ſituated therein, through the ſame; it would not be difficult for him to imagine the ſeveral objects as painted upon the glaſs in the ſame proportion one to another, and on the ſame parts which they appear to have and occupy upon the window. Such a painting would be the true perſpective repreſentation of thoſe objects to an eye ſituated in the place of the obſerver's; and the buſineſs of perſpective is no more than *by having the place of the eye and objects given, to find rules whereby ſuch a repreſentation may be drawn.*

2. Since the perſpective repreſentation of all ſuperficies will become known when *that* of the ſeveral lines which compoſe their boundaries become known, and ſince the repreſentation of any ſolid is made up of the images of its ſeveral ſurfaces, it follows, that the rules of perſpective may be confined to points and lines only, the images of which properly connected, will form the repreſentation of any object whatever.

3. Therefore, as objects appear or are ſeen by rays of light which are reflected from every point in their ſurfaces in right lines to the eye, it is eaſy to conceive, that *the repreſentation of any given point in an object, as it appears on a tranſparent plane interpoſed between the object and the eye, will be that point in the plane, which is cut by a right line drawn from the eye to the given point in the object:* In like manner, *the repreſentation of a given line in any object will be a line on the tranſparent plane made by the interſection of a plane of rays, ſuppoſed to flow from every point in the given line to the eye, with the tranſparent plane.*

4. The plane on which the objects and obſerver are ſuppoſed to ſtand, as D F N T *(vide Fig.* 1.) is ſuppoſed perfectly even and level, and called the *ground plane.*

5. The tranſparent plane (G L Q P) on which the perſpective repreſentation of the objects is ſuppoſed to be drawn, ſtands perpendicularly on the ground plane, and is called the *picture.*

6. That line made by the interſection of the picture and ground plane, as G L, is denominated the *ground line.*

7. *The place of the eye,* as E, is that point occupied by the eye of the ſpectator.

8. *Its height,* is the perpendicular E I let fall from the place of the eye upon the ground plane.

9. *Its diſtance from the picture,* is another perpendicular E C, let fall from the eye E upon the picture G L Q P; and

10. That point C where the perpendicular drawn from the eye cuts the picture is called *the center of the picture.* This premiſed,

11. Imagine

11. Imagine the ground plane DFNT to be extended or continued beyond NT infinitely, I ſay, *the perſpective of its boundary will be the line* HO, *made by the interſection of a plane* KMOH *paſſing through the eye* E *and parallel to the ground plane* GLNT. For, ſuppoſe the line bb drawn parallel to the ground line GL, then will the interſection of the plane KMbb, paſſing through the eye E, with the picture, give the line *bb*, the perſpective repreſentation of bb, *(per art. 3.)* Now if we imagine the line bb to be removed further from GL along the ground plane, it is evident from the figure that its repreſentation *bb* will alſo be removed higher in the picture from the ground line GL, and the plane KMbb, of conſequence, will approach the parallel one KMOH; and this will continually be the caſe, ſo long as the line bb continues to recede from GL, till at laſt, if we ſuppoſe bb removed to an infinite diſtance, the plane KMbb will coincide with the plane KMOH, and become parallel to the ground plane, and the repreſentation of bb, in this caſe, muſt of conſequence be the line HO.

12. The line HO or perſpective of the boundary of the plane GLNT infinitely continued, is called the *vaniſhing line* of that plane; and ſince the reaſoning we have given above (11) will hold, let the ſituation of the plane GLNT with relation to the picture be what it will; it follows, *that the vaniſhing line of any plane, (or the perſpective of its boundary ſuppoſing it infinitely continued) is that line in the picture where it is cut by another plane paſſing through the eye and parallel to the given one.*

13. Hence (11, 12.) *the vaniſhing line of any plane, is alſo the vaniſhing line of all planes which are parallel to that plane.*

14. The ground plane GLNT being that on which the ſubjects for perſpective are generally placed, its vaniſhing line HO is particularly called the *horizontal line*, as being the perſpective of the horizon, or boundary of the heavens and earth; the ſpace GLOH, in the picture, will, therefore be the indefinite appearance of the ground plane infinitely extended beyond GL, conſequently the ſpace GLOH will contain in it the repreſentation of all objects ſubſiſting in that plane.

15. A line drawn on any plane, and continued *ad infinitum*, will terminate in the infinite boundary of that plane; therefore the perſpective of the extremity of that line, ſo continued, will be a point ſomewhere in the vaniſhing line of that plane wherein it lies, which point is called the *vaniſhing point* of the line.

16. The vaniſhing point of any line ſituated in a plane whoſe vaniſhing line is known, will be *that point where a line drawn from the eye, and parallel to the given line interſects the vaniſhing line.* And this point will alſo be the vaniſhing point of all lines parallel to the given one. The reaſon of this will be evident by applying the demonſtration in art. 11. to lines.

We are now prepared to conſider the perſpective repreſentation of objects ſituated on the ground plane; and firſt:

CHAP. I.

Of Lines and Plane Superfices.

17. All lines (ſuch as aa) perpendicular to the picture, will have their vaniſhing point (15) at C, the center of the picture. For that is the point cut in the vaniſhing line HO of the plane by the line EC drawn from the eye E, and parallel to (aa) the given line. (16)

18. All lines (bb) parallel to the picture, can have no vaniſhing point;

ſince a line drawn from the eye parallel to them, will be alſo parallel to the picture, and of conſequence can never cut it to give the vaniſhing point: therefore theſe lines will have their images on the picture parallel among themſelves and alſo to the ground line G L: For the plane K M b b giving the perſpective of the line b b cuts the ground plane in a line b b parallel to G L, and alſo to the plane of the picture, therefore it cuts the picture in a line *b b* parallel to b b, and, of conſequence, to G L.

19. Any line (c c) oblique with the picture, will have a vaniſhing point *(c)* in that part of the horizontal line, where a parallel (E *c*) to the given line (c c) paſſing through the eye E cuts it. (16.)

20. If the lines a a, c c, be continued till they interſect the ground line G L, and from thoſe interſections lines be drawn to their reſpective vaniſhing points (as a C, c *c*,) thoſe lines will be the true perſpective repreſentation of the lines a a, c c, infinitely continued, (14.) And as the interſections of the lines a a, b b, c c, form the triangle m n o on the ground plane, ſo the interſections of their perſpectives a C, *b b*, c c, give the triangle *m n o* on the picture, the true appearance of the triangle m n o to an eye at E. (2, 3.)

21. Hence, we have a general rule for finding the perſpective of any ſuperficies contained under right lines: For having found the indefinite images of its ſeveral ſides (17, 18, 19,) their interſections will give the perſpective of the figure required (20.)

To the Editors of the General Magazine.

GENTLEMEN,

Bingham, Oct. 14, 1764.

AS you publiſhed Mr. Bamfield's letter, I ſuppoſe with an intent that ſomebody might anſwer it, and finding nothing concerning it in your laſt, I troubled you with the following; which is not intended as a conviction to Mr. Bamfield, as I am very well convinced, poor man, that his malady is without cure: nor have I gone any farther than the outlines of philoſophy, for there is no danger of any conſiderable mathematician being miſled by ſuch demonſtrations as his; what I have done is only for the ſatisfaction of the young and unſkilled in theſe matters, who are the only perſons likely to be hurt by ſuch unſcientific demonſtrations, and vain aſſertions; which are indeed a real detriment to ſcience in general, tending to perplex young perſons, and deter them from theſe ſtudies, eſtabliſh ſophiſtry inſtead of learning, which is the moſt certain means to make us degenerate into our primitive barbarity, if the following then can be of the leaſt ſervice to prevent this, I have my end.

Firſt, therefore, people are not to expect, ſuch exact, palpable, or occular demonſtration, as is not in the power of humanity to give; we cannot go up into Heaven to ſee whether the Sun, Moon, and Planets, regulate their motions according to this or the other ſuppoſition; all that we can do is to trace them out from ſuch effects and appearances, as we ſee here on earth: and if this power and the parity of reaſon be taken away, neither Mr. Bamfield nor any body elſe, need trouble us with either aſtronomy or philoſophy, all will be but meer conjecture, as it was before Sir

Iſaac

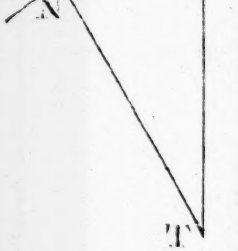
Iſaac Newton who firſt applied experiment to aſtronomical philoſophy.

I ſhall endeavour to ſtate the matter fairly, and then let any reaſonable, unprejudiced and impartial perſon judge. The *Newtonian* philoſophy is founded on this ſimple experiment, that if an heavy body be not ſupported it will fall to the earth; and if any body doubts the truth of this, they are deſired themſelves to make the experiment; and it has alſo been found by repeated trials; that abſtracting from the reſiſtance of the air, whilſt a pendulum vibrates once, an heavy body will fall through eight times the length of that pendulum; and every body knows that a body will come to the ground with the greater force, the higher the place is from which it is let fall. It is likewiſe ſo well known that it would be needleſs to demonſtrate here, that the ſtrength of all effects that are communicated from a center, becomes leſs and leſs the more the diſtance is increaſed, thus the farther from a candle, the leſs the light; the farther from a fire, the leſs the heat; decreaſing in what mathematicians call the reciprocal duplicate ratio of the diſtances. And conſequently if there be any ſuch force as our philoſophers define the force of gravity to be, it muſt of neceſſity decreaſe when the diſtances from the center increaſe; and agreeable to this, the French mathematicians at the equator found, being obliged to ſhorten their pendulums according to the above mentioned ratio, which is an undeniable proof that the force of gravity decreaſes in the ſame proportion as light and heat. And if the force of gravity can bring down an heavy body at 10 miles diſtance from the ſurface of the earth, what imaginable reaſon can be given, why (if we allow time for force) it may not bring it down at 100 or 1000, *&c.* miles diſtance? And if the moon be a body, which I think hardly any body will deny, it becomes philoſophers to give ſome reaſon or other, why ſhe has not before now come tumbling down about our ears. Now, in order to this, it is evident to every one, that if an heavy body be projected obliquely it will not deſcend directly, but will endeavour to continue in the direction in which it was projected; this Mr. *Bamfield* himſelf allows that every child knows (aſtron. p. 88.) but we ſee that by degrees it comes to the ground actuated by the power of gravity, this every body allowed before Sir *Iſaac Newton* was born: and abſtracting from the reſiſtance of the air, and ſome other minute effects, it has been proved over and over again, that the path every ſuch body deſcribes is a parabola; at leaſt with any force that we are able to give it. But was it in our power to ſend a body off with a ſufficient velocity, it is manifeſt from meer geometrical principles that it would never return, but the parabola, becoming an ellipſis, it would continually revolve about the earth, having the center of the earth for its focus; as indeed, if the different gravity at different heights be taken into conſideration, every projectile even near the earth's ſurface will not accurately deſcribe a parabola, but a portion of a very large ellipſis, having its lower focus at the center of the earth, unleſs the body be projected with ſo great a velocity as that of 420 miles per minute, in which caſe, if it was projected obliquely, it would go off in a parabola, having its focus in the center of the earth, and never return to the earth again. — All this is demonſtrated by ſeveral authors, upon thoſe principles alone which I have before mentioned, and follows

as

as any eaſy corollary to prop. XI. p. 260 of *Simpſon*'s fluxions, which I the rather chooſe to refer to, becauſe moſt people are better acquainted with the analytic method of inveſtigation, than with the ſynthetic one of demonſtration.——But to proceed, if it can be demonſtrated by geometry that the common force which makes all bodies deſcend to the earth, would alſo make them, if they were projected with ſufficient velocity, revolve in ellipſes; and we ſee that the moon is ſuch a body as revolves round the earth, and never comes down to it, why then may we not ſuppoſe it to be projected with ſo great a velocity, as to make it revolve in an ellipſis? And indeed if we had no other ground than this probable conjecture, I fear that if the preſent philoſophy was thrown aſide, we ſhould find it a very difficult matter to found another upon a more certain hypotheſis.

But indeed, this is far from being only meer conjecture, for it admits of the ſtrongeſt proof, that is perhaps in the power of humanity in theſe matters. Let N P repreſent ſuch a portion of the lunar orbit as is deſcribed in one minute, and let R P be a tangent to it at P, P T perpendicular to R P, T the center of the earth, and draw R *n* parallel to P T, then it is well known that R *n* will repreſent the ſpace an heavy body would fall through, during the time of deſcribing P N; and the mean radius of the moon's orbit being nearly equal to 60 radii of the earth, it is very eaſy to find the ſubtenſe R *n* nearly

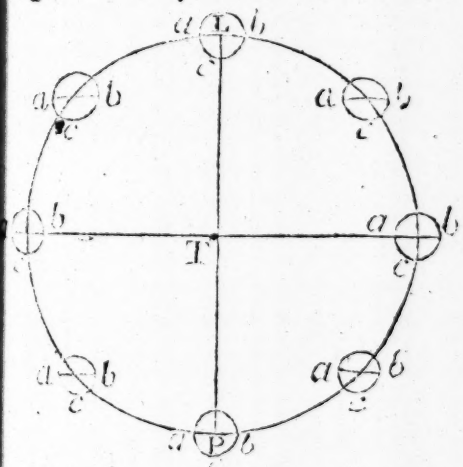


equal to 15 $\frac{1}{12}$ pariſian feet, the ſpace that the moon would fall thro' the firſt minute, if ſhe was let drop towards the earth. Now the force of gravity decreaſing as the ſquares of the diſtances increaſe, at the diſtance of 60 ſemi-diameters, it could only impel a body towards the earth with $\frac{1}{60 \times 60} = \frac{1}{3600}$ part of the force it does at the ſurface; but at the ſurface it is known that bodies deſcend at the rate of 15 $\frac{1}{12}$ *Paris* feet per ſecond, or 54300 per minute; the $\frac{1}{3600}$ of which is 15 $\frac{1}{12}$ the diſtance than an heavy body would deſcend in a minute at the diſtance of the moon. Now becauſe any heavy body at the diſtance of the moon, would deſcend towards the earth with the ſame velocity as the moon; is there not all the reaſon in the world to ſay, that the moon is an heavy body, kept in its orbit like any other projectile by the force of gravity.

And the application of this method of reaſoning to the ſun and planets is the foundation of the preſent aſtronomy, and the more nicely this theory has been inſpected, the more exactly has it been found to agree with obſervations; which, I ſhould think is the greateſt proof of its truth, that can be wiſhed for; and this has been the reaſon that, though at firſt it was almoſt univerſally oppoſed, it is now almoſt as univerſally received, even in foreign countries: only ſome few malevoli objecting againſt it. And though we cannot account for ſome few appearances in ſo exact a manner as we could wiſh, it is only a ſign that there is ſome work left for future obſervers; it is rather ſurprizing that cœleſtial phænomena ſhould be accounted for in ſo exact a manner as they really are.

With regard to Mr. *Bamfield*'s objections they are really ſo trifling, and

and impertinent, as to render a ſerious anſwer to them in a manner ridiculous. For Sir *Iſaac* in the place he mentions, does not pretend to determine any particular curve, as indeed the property he mentions will ſuit innumerable curve lines, depending upon the line G B to which C *c* muſt needs be always equal, he only proves that this property muſt exiſt in a planet's motion, let its orbit be what it will. As to the rough language he gives Sir *Iſaac*, I ſuppoſe it will do but little prejudice to the works or memory of this great man; but it is really ſurprizing that he ſhould not be able to ſee, that whether the moon moves, as is commonly ſuppoſed, without being hampered; or whether ſhe be harneſſed with his iron or ſtring, it is the ſame thing; only I cannot allow that the imagining her to revolve with a ſtring at her, would be infinitely more natural; neither is is poſſible that the moon ſhould turn always the ſame face towards the earth; unleſs her angular celerity about her own axis, be equal to her angular celerity about the earth: if



this needs any illuſtration; let T repreſent the earth, L the new, and P the full moon, and let the moon be drawn in any other number of poſitions as in the figure, let *a b* be a tangent to the orbit at L, then if the moon's body has no annular motion, its axis *a b* muſt of neceſſity be, in every place of the orbit, parallel to itſelf; let therefore all the lines *a b*, *a b*, &c. be drawn parallel one to another, then will *a c b*, *a c b*, &c. repreſent the ſame face of the moon moving without any angular celerity about it's center, and conſequently at P the face *a b c* inſtead of being turned towards the earth T will be turned directly from it; and ſo on in proportion for any other poſition; the ſame face being never turned towards the earth till the moon arrives at its firſt poſition L again, but the moon in the Heavens always turns the ſame face towards the earth, therefore the moon turns about her own axis, Q. E D.

If young people, when they begin to ſtudy, would make themſelves acquainted well with the firſt principles, and ground-work of Science, it would prevent their expoſing themſelves to ridicule, by ſhewing their own ignorance in publiſhing ſuch injuſtifiable notions; for it is their running on from one thing to another, without thoroughly digeſting any thing, that makes them at their lives end, not a whit the wiſer, their reaſoning faculties being rather confounded than improved. ——— This caution ſeems the more neceſſary, as I have known inſtances of people, that have cut a conſiderable figure in the magazines, &c. as mathematicians, who yet upon examination have been found unable to demonſtrate by lines, that the three angles of a plane triangle are equal to two right ones. I therefore intended at firſt for the benefit of ſuch perſons, to have demonſtrated every thing I have ſaid from firſt principles as I went along, but finding that it would take up more

more room than I at firſt ſuſpected, and as every thing that I have taken for granted has been demonſtrated over and over again by ſuch numbers of authors, and having been, I fear, already full prolix for your limits, I muſt conclude, having ſcarcely left room to ſubſcribe myſelf,

Gentlemen,
Your conſtant reader, and
Humble Servant,
C. Wildbore.

Of the taking off Mezzotinto Prints on Glaſs, and painting upon them with Oil, or varniſh Colours.

THE painting on glaſs, by means of mezzotinto prints, is performed by cementing the printed ſide of the prints to the ſurface of the glaſs, by the aſſiſtance of ſome glutinous body which will not diſſolve in water; and then deſtroying the texture of the paper by water, ſo that it may be rubbed intirely off from the cement upon the glaſs; leaving, at the ſame time, the whole of the ink of the print upon the cement, and glaſs, in the ſame manner as if the original impreſſion had been made there; by which method, a complete drawing of the picture deſigned is obtained on the glaſs; and may be coloured by the uſe of oil, varniſh, or water colours.

The method of performing this is as follows.

Procure a piece of the beſt crown glaſs as near as poſſible in ſize to the print to be taken off; and varniſh it thinly over with turpentine, rendered a little more fluid by the addition of oil of turpentine. Lay the print then on the glaſs beginning at one end; and preſſing it gently down in every part in proceeding to the other: to prevent any veſicles of air being formed, in the laying it on, by the paper touching the cement unequally in different parts; and to ſettle the whole more cloſely to the glaſs, it is well to paſs over a wooden roller over it; which roller may be made of any kind of wood turned, and may be about two inches in diameter. Dry the glaſs, with the print thus laid upon it, at the fire, till the turpentine be perfectly hard; and afterwards moiſten the paper well with water, till it be thoroughly ſoaked. Then rub off the paper intirely from the cement, by gently rolling it under the finger; and let it dry without any heat: the impreſſion of the print will be found perfect on the glaſs; and may be painted over with either oil or varniſh colours.

The choice and treatment of the colours for painting in this way upon glaſs, in either oil or varniſh, may be the ſame as for any other method.

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THomas Simpson was born at *Market-Boſworth*, in *Leiceſterſhire*, *Auguſt* the 20th, *O. S.* 1710. His Father was a Stuff-weaver in that Town; and though in tolerable Circumſtances, yet, intending to bring up his Son *Thomas* to his own Buſineſs, he took ſo little Care of his Education, that he was only taught to read *Engliſh*.

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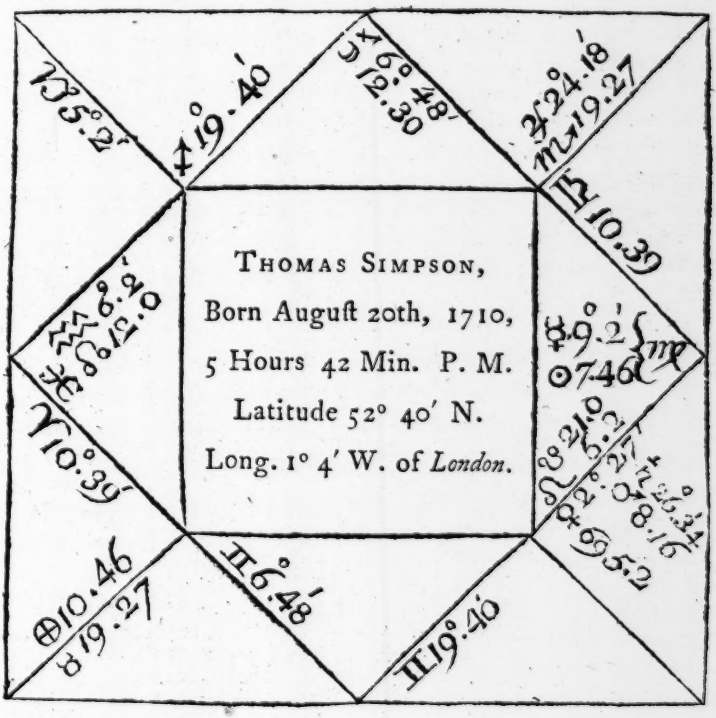

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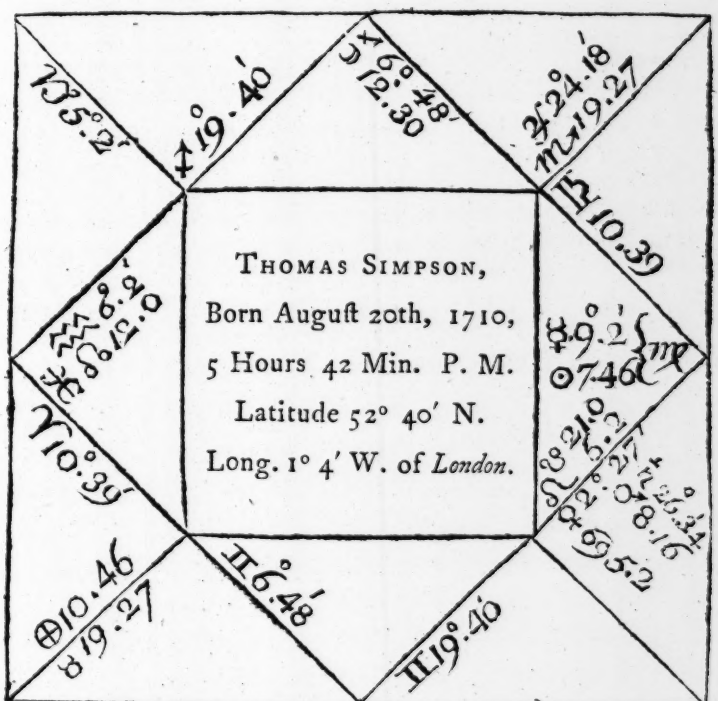


This Poſition of the Heavens the Wizard having very maturely conſidered *ſecundem artem*, did, with much Confidence, pronounce, that *within two Years time* Simpſon *would turn out a greater Man than himſelf!*

It was not long after this that Mr. *Simpſon*, being pretty well qualified to erect a Figure himſelf, did, by the Advice of his Friend, make an open Profeſſion of caſting Nativities; from whence he derived a pretty Pittance, ſo that he quite neglected his weaving, to which indeed he had never manifeſted any very great Attachment, and ſoon became the Oracle of *Boſworth* and its Environs. Scarce a Courtſhip advanced to a Match, or a Bargain to a Sale, without previouſly conſulting the infallible *Simpſon* about the Conſequences. Helping Folks to ſtolen Goods, he always declared above his Match; and that as to Life and Death he had no power. All thoſe called *lawful Queſtions* he readily reſolved, provided the perſons were certain as to the horary *Data* of the Horoſcope: And, I have heard him ſay, more than once, with ſuch Succeſs, that if, from very cogent Reaſons, he had not been thoroughly convinced of the vain Foundation and Fallaciouſneſs of his Art, he never ſhould have dropt it, as he then thought himſelf in conſcience bound to do, and accordingly abandoned it at once.

Together with his Aſtrology he had furniſhed himſelf with enough Arithmetic, Algebra, and Geometry to qualify him for looking into the *Ladies Diary*, (of which he had afterwards the Direction) whereby he came to underſtand that there was ſtill a higher Branch of Mathematical Knowledge than any he had been yet acquainted with; and this was the Method of *Fluxions:* Nevertheleſs our young Analyſt was altogether at a loſs to diſcover any any Engliſh Author who had written on the Subject, except Mr. *Hayes*; and his Work being a Folio, and then pretty ſcarce, exceeded his Ability of purchaſing: However, an Acquaintance lent him Mr. *Stone*'s *Fluxions*, which is a Tranſlation of the *Marquis de l'Hoſpital's Analyſe des infinitemens Petits:* By this one Book and his own penetrating Talents, he was, as we ſhall preſently ſee, enabled in a very few Years to compoſe a much more accurate Treatiſe on this Subject than any that had before appeared in our language.

After he had bid adieu to Aſtrology and its Emoluments, he was driven to Hardſhips for the Subſiſtance of his Family, having married a Widow with two Children, who ſoon brought him two more. He came up to *London*, and for ſome Time wrought at his Buſineſs in *Spittalfields*, and taught Mathematics when he had any ſpare Time. His Induſtry turned to ſo good Account, that he went home and brought up his Wife and Children to ſettle in *London*. The Number of his Scholars increaſing, and his Abilities becoming in ſome Meaſure known to the Public, he put forth Propoſals for publiſhing by Subſcription, *A new Treatiſe of Fluxions, wherein the Direct and Inverſe Method are demonſtrated after a new, clear, and conciſe Manner; with their Application to Phyſics and Aſtronomy. Alſo, The Doctrine of infinite Series and reverting Series univerſally, and amply explained; fluxionary and exponential Equations ſolved, &c.*

When Mr. *Simpſon* firſt propoſed his Intentions of publiſhing ſuch a Work, he did not know of any *Engliſh* Book founded on the true Principles of *Fluxions*, that contained any Thing material, eſpecially the practical Part; and though there had been ſome very curious Things done by ſeveral learned and ingenious Gentlemen, the Principles were never-

nevertheleſs left obſcure and defective, and all that had been done by any of them in *infinite Series*, very inconſiderable.

The Book was not publiſhed till 1737; the Author having been frequently interrupted from furniſhing the Preſs ſo faſt as he could have wiſhed, through his unavoidable Attention to his Pupils for his immediate Support. The Principles of *Fluxions* therein treated of, are demonſtrated in a Method exactly true and genuine, not eſſentially different from that of their great Inventor, being altogether expounded by *finite Quantities*. In the firſt and ſecond Parts are given a great many new, and ſome very curious Examples in the Solutions of Problems, rendered plain to ordinary Capacities.

The ſecond Part treats of *Infinite Series* where nothing is propoſed without Demonſtration, and every Thing illuſtrated by eaſy Examples. A ſet of new Rules are laid down for finding the Forms of Series, without taking in any of the ſuperfluous Terms.

The third Part contains a familiar Method of finding and comparing Fluents, illuſtrated with ſome uſeful and eaſy Applications.

In the fourth Part is ſhewn the uſe of *Fluxions* in ſome of the ſublimeſt Branches of *Phyſics* and *Aſtronomy*; where, beſides ſeveral Things done in a Method quite different from any thing to be met with in other Authors, there are ſome very uſeful Speculations relating to the *Doctrine of Pendulums* and *Centripetal Forces*.

To this is added, a *Supplement*, being a Collection of miſcellaneous Problems, independent of the foregoing four Parts; and containing, among other Matters, an Inveſtigation of the Areas of *Spherical Triangles*; the *Curve* of *Purſuit*; the *Paths* of *Shadows*; the Motion of *Projectiles* in a *Medium*; and the manner of finding the *attractive Force* of Bodies in different Forms, acting according to a given Law.

In 1740, Mr. *Simpſon* publiſhed a Treatiſe *On the Nature and Laws of Chance*, in 4to. To which is annexed, *full and clear Inveſtigations of two important Problems added in the ſecond Edition of Mr.* De Moivre's *Book on Chances*; and *Two new Methods for ſumming of Series*

His next performance was a 4to. volume of *Eſſays on ſeveral curious and uſeful Subjects in Speculative and mixed Mathematics*. Dedicated to *Francis Blake*, Eſquire, ſince *Fellow of the Royal Society*, and his very good Friend and Patron. Printed in the ſame year 1740.

The firſt of theſe Eſſays ſhews the Theory of the apparent Place of the Stars (commonly called their *Aberration*) ariſing from the progreſſive Motion of Light, and of the Earth in its Orbit, with practical Rules for computing the ſame, communicated by Dr. *Bevis*.

The ſecond treats of the Motion of Bodies affected by Projectile and Centripetal Forces; wherein the moſt conſiderable Matters in the firſt Book of *Newton*'s *Principia* are clearly inveſtigated.

The third is a ſolution of *Kepler*'s Problem, with a conciſe Practical Rule.

The fourth is of the Motion and Paths of Projectiles in reſiſting Mediums; determining the moſt important Things, upon this Head, in the ſecond Book of the *Principia*.

The fifth conſiders the Reſiſtances, Velocities, and Times of Vibration of pendulous Bodies in Mediums.

The ſixth contains a new Method of ſolution of all Kinds of Algebraical Equations in Numbers, more general than any before given.

The ſeventh is about the Method of *Increments*, with Examples.

The eighth is a ſhort Inveſtigation of a Theorem for finding the Sum of a Series of Quantities, by means of their Differences.

The ninth is a general way of Inveſtigating the ſum of a recurring Series.

The tenth is a new and general Method for finding the Sum of any Series of Powers, whoſe Roots are in Arithmetical Progreſſion; and applicable to Series of other Kinds.

The eleventh concerns Angular Sections, with ſome remarkable Properties of the Circle.

The twelfth ſhews an eaſy and expeditious Method of reducing a compound Fraction to ſimple ones.

The thirteenth and laſt, containing a general Quadrature of Hyperbolical Curves, is a Problem that had exerciſed the Skill of ſeveral great Mathematicians; none of the Solutions then publiſhed extended further than to particular Caſes, except one in the *Philoſophical Tranſactions*, without Demonſtration, by M. *Klingenſtierna*, Profeſſor of Mathematics at *Upſal*. This, Mr. *Simpſon* has here inveſtigated by two different Methods, and rendered the general Conſtruction extremely eaſy, ſimple, and fit for Practice.

Mr. *Klingenſtierna* appears to have been well pleaſed with what Mr. *Simpſon* had done; for being afterwards appointed Secretary to the *Royal Academy* at *Stockholm*, as a Mark of his Eſteem, he procured a Diploma to be tranſmitted to him, whereby he was conſtituted a Member of that learned Body.

The Doctrine of Annuities and Reverſions deduced from general and evident Principles: with uſeful Tables ſhewing the Values of ſingle and joint Lives, &c. at different Rates of Intereſt, &c. 8vo. 1742. This in 1743 was followed by an *Appendix containing ſome Remarks on a late Book on the ſame Subject* (by Mr. *Abr. de Moivre*, F. R. S.) *with Anſwers to ſome perſonal and malignant Repreſentations in the Preface thereof.*

Mr. *de Moivre* never thought fit to reply to it.

In 1743 he publiſhed his *Mathematical Diſſertations on a Variety of Phyſical and Analytical Subjects* in 4to. containing, among other Particulars,

A Demonſtration of the true Figure which the Earth, or any Planet muſt acquire from its Rotation about an Axis.

A general Inveſtigation of the Attraction at the Surfaces of Bodies nearly ſpherical.

A Determination of the Meridional Parts, and the Lengths of the ſeveral Degrees of the Meridian according to the true Figure of the Earth.

An Inveſtigation of the Height of the Tides in the Ocean.

A new Theory of Aſtronomical Refractions, with exact Tables deduced therefrom.

A new and very exact Method for approximating the Roots of Equations in Numbers; which quintuples the Number of Places at each Operation.

Several new Methods for the Summation of Series.

Some new and very uſeful Improvements in the inverſe Method of Fluxions.

This Work he dedicated to *Martin Folkes*, Eſq; Preſident of the Royal Society.

His next Book was *a Treatiſe of Algebra, wherein the Fundamental Principles are fully and clearly demonſtrated, and applied to the Solution of a variety of Problems.* To which he added, *The Conſtruction of a great Number of Geometrical Problems, with the Method of reſolving them numerically.*

This Work was deſigned for the uſe of young Beginners; inſcribed to *William Jones*, Eſq; F. R. S. and printed

printed in 1745, 8*vo*. A new Edition appeared in 1755, with Additions and Improvements. This is dedicated to *James Earl of Morton*, F. R. S. Mr. *Jones* being dead.

Elements of *Geometry, with their Application to the Menſuration of Superficies and Solids, to the Determination of* Maxima *and* Minima, *and to the Conſtruction of a great Variety of Geometrical Problems*. Firſt publiſhed in 1747, in 8*vo*. A 2d Edition came out in 1760, with large Alterations and Additions, deſigned for young Beginners, particularly for the Gentlemen educated at the King's Academy at *Woolwich*, and dedicated to *Charles Fredick*, Eſq; Surveyor general of the Ordnance.

In 1748 came out his *Trigonometry, Plane and Spherical, with the Conſtruction and Application of Logarithms*, 8*vo*. This little Book contains ſeveral things new and uſeful.

Select Exerciſes for young Proficients in the Mathematics, 8*vo*. 1752.

It contains a large Variety of Algebraical Problems with their Solutions.

A ſelect Number of Geometrical Problems, with their Solutions both Algebraical and Geometrical.

The Theory of Gunnery, independent of the Conic Sections.

A new and very comprehenſive Method for finding the Roots of Equations in Numbers.

A ſhort account of the firſt Principles of Fluxions.

The Valuation of Annuities for ſingle and joint Lives, with a ſet of new Tables, far more extenſive than any extant——This laſt was deſigned as a Supplement to his *Doctrine of Annuities and Reverſions*, but being thought too ſmall to be publiſhed alone, it was inſerted here. The Examples given are according to the *London* Mortality Bills; but the Solutions are general, and may be applied with equal Facility and Advantage, to any Table of Obſervations. The Dedication is to *John Bacon*, Eſq; F. R. S.

The Doctrine and Application of Fluxions, containing, beſides what is common on the Subject, a Number of new Improvements in the Theory, and the Solution of a Variety of new and very intereſting Problems in different Branches of the Mathematics. Two Volumes 8*vo*. 1750.

In the Preface the Author offers this to the World as a new Book, rather than a ſecond Edition of that publiſhed in 1737, in which he acknowledges, that, beſides Preſs-errors, there are ſeveral Obſcurities and Defects, for want of Experience, and the many Diſadvantages he then laboured under, in his firſt Sally.

The Notion and Explication here given of the firſt Principles of *Fluxions*, are not eſſentially different from what they are in his former Treatiſe, though expreſſed in other Terms. The Conſideration of *Time* introduced into the general Definition, will, he ſays, perhaps be diſliked by thoſe who would have Fluxions to be *mere Velocities:* But the Advantage of conſidering them *otherwiſe* (not as the Velocities themſelves, but the Magnitudes *they* would, uniformly generate in a given *Time)* appears to obviate any Objection on that Head.

By taking Fluxions as *meer Velocities*, the Imagination is confined, as it were, to a Point, and, without proper Care, inſenſibly involved in metaphyſical Difficulties: But according to this other Method of explaining the Matter, leſs Caution in the Learner is neceſſary, and the higher Orders of Fluxions are rendered much more eaſy and intelligible. —— Beſides, though Sir *Iſaac Newton*, defines Fluxions to be *the Velocities of Motions*, yet he has Recourſe

courſe to the Increments or Moments generated in equal Particles of Time, in order to determine thoſe Velocities; which he afterwards teaches to expound by finite Magnitudes of other Kinds.

This Work is dedicated to *George* Earl of *Macclesfield*.

Mr. *Simpſon*'s *Miſcellaneous Tracts*, printed in 1757 in 4to. was his laſt Legacy to the Public: A moſt valuable Bequeſt, whether we conſider the Dignity and Importance of the Subjects, or his ſublime and accurate Manner of treating them.

The firſt of theſe Papers is concerned in determining the *Preceſſion of the Equinox*. It was drawn up about the Year 1752, in conſequence of another on the ſame Subject, by M. *de Sylvabelle*, a *French* gentleman. Though its Author had gone through one *Part* of the Subject with Succeſs and Perſpicuity, and his Concluſions were perfectly conformable to Dr. *Bradley*'s Obſervations; he nevertheleſs appeared to Mr. *Simpſon*, to have greatly failed in a very material, and, indeed, the only very difficult Part; that is, in the Determination of the *momentary Alteration* of the Poſition of the Earth's Axis, cauſed by the Forces of the *Sun* and *Moon*; of which Forces, the Quantities, but not the Effects, are truly inveſtigated.

The ſecond Paper contains the Inveſtigation of a very exact Method or Rule; for finding the Place of a *Planet* in its *Orbit*, from a Correction of Biſhop *Ward*'s circular Hypotheſis, by Means of certain Equations applied to the Motion about the upper Focus of the Ellipſe. By this Method, the Reſult, even in the Orbit of *Mercury*, may be found within a Second of the Truth, and that without repeating the Operation.

The third ſhews the Manner of transforming the Motion of a *Comet* from a *parabolic*, to an *elliptic Orbit*; being of great Uſe, when the *obſerved Places* of a (new) *Comet*, are found to differ ſenſibly from thoſe computed on the Hypotheſis of a parabolic Orbit.

The fourth is an Attempt to ſhew, from mathematical Principles, the Advantages ariſing from taking the *Mean* of a *Number* of Obſervations, in *practical Aſtronomy*; wherein the Odds that the Reſult, this Way, is more exact, than from one ſingle Obſervation, is evinced, and the Utility of the Method in Practice, clearly made appear.

The fifth contains the Determination of certain *Fluents*, and the Reſolution of ſome very uſeful *Equations*, in the higher Orders of Fluxions, by Means of the Meaſures of Angles and Ratios; and the right and verſed Sines of circular arcs.

The ſixth treats of the Reſolution of Algebraical Equations, by the Method of Surd-diviſors; wherein the Grounds of that Method, as laid down by Sir *Iſaac Newton*, is inveſtigated and explained.

The ſeventh exhibits the Inveſtigation of a *general Rule* for the Reſolution of *Iſoperimetrical Problems* of all Orders, with ſome Examples of the Uſe and Application of the ſaid Rule.

The eighth, and laſt, comprehends the Reſolution of ſome general and very important Problems in *Mechanics* and *phyſical Aſtronomy*, wherein, among others, the principal Parts of the third and ninth *Sections* of the firſt *Book* of Sir *Iſaac Newton*'s *Principia*, are demonſtrated, in a new and conciſe Manner. — But what may beſt recommend this excellent Tract, is the Application of the general Equations therein derived, to the Determination of the LUNAR ORBIT.

According to what Mr. *Simpſon* had intimated at the Concluſion of his

his *Doctrine of Fluxions*, the greateſt Part of this arduous Undertaking was drawn up in the Year 1750. About that Time M. *Clairaut*, a very eminent Mathematician of the *Pariſian* Academy, had ſtarted an Objection againſt Sir *Iſaac Newton*'s general Law of Gravitation. This was a Motive to induce Mr. *Simpſon* (among ſome others) to endeavour to diſcover whether the Motion of the Moon's *Apogee*, on which that Objection had its whole Weight and Foundation, could not be truly accounted for, without ſuppoſing a Change in the received Law of Gravitation, from the *inverſe Ratio of the Squares of the Diſtances*. The Succeſs anſwered his Hopes, and induced him to look further into other Parts of the Theory of the Moon's Motion, than he had at firſt intended: But before he had compleated his Deſign, Mr. *Clairaut* arrived in *England* and made Mr. *Simpſon* a Viſit; from whom he learnt, that he had a little before printed a *Piece* on that Subject, a Copy of which Mr. *Simpſon* afterwards received as a Preſent, and found in it the ſame Things demonſtrated, to which himſelf had directed his Inquiry, beſides ſeveral others.

The *facility* of the Method Mr. *Simpſon* fell upon, and the *Extenſiveneſs* of it, will in ſome Meaſure appear from this; that *it*, not only determines the Motion of the *Apogee*, in the ſame Manner, and with the ſame Eaſe, as the other Equations, but utterly excludes all that dangerous kind of Terms that had embarraſſed the greateſt *Mathematicians*, and would, after a great Number of Revolutions, entirely change the Figure of the Moon's Orbit. From whence this important Conſequence is derived, that the Moon's *Mean Motion*, and the *greateſt Quantities of the ſeveral Equations* will remain unchanged; unleſs diſturbed by the Intervention of ſome foreign or accidental Cauſe.

Theſe Miſcellanies are inſcribed to the Earl of *Macclesfield*, Preſident of the Royal Society.

Several Papers of Mr. *Simpſon*'s were read at Meetings of the Royal Society, and printed in their *Tranſactions*: But as moſt, if not all of them, were afterwards inſerted, with Alterations or Additions, in his printed Volumes, it would be needleſs to take any Notice of them here.

From Mr. *Simpſon*'s Writings, I now return to himſelf. Through the Intereſt and Solicitations of the before mentioned *William Jones*, Eſq; he was, in 1743, appointed Profeſſor of Mathematics then vacant by the Death of Mr. *Derham*, in the King's Academy at *Woolwich*; his Warrant bearing Date, *Auguſt* 25. Not long after this he was choſen a Member of the Royal Society. The Preſident and Council, in Conſideration of his very moderate Circumſtances, were pleaſed to excuſe his Admiſſion Fees, and likewiſe his giving Bond for the ſettled future Payments. At the Academy he exerted his Faculties to the utmoſt, in inſtructing the pupils who were the immediate Objects of his Duty, as well as others, whom the ſuperior Officers of the Ordnance permitted to be boarded and lodged in his Houſe. In his Manner of teaching he had a peculiar and happy Addreſs; a certain Dignity and Perſpicuity tempered with ſuch a degree of Mildneſs, as engaged both the Attention, Eſteem, and Friendſhip of his Scholars; of which the good of the Service, as well as of the Community, was a neceſſary Conſequence. Notwithſtanding the Applauſe Mr. *Simpſon* acquired of his Superiors in the Acquital of his Duty at *Woolwich*.

wich, he had the Misfortune to find his Health decline, through his close Manner of Living, and the want of conversing with his Friends. His weak Constitution of Body was ill adapted to the Vigour of his Mind, having been framed with originally weak Nerves. Exercise and a proper Regimen were prescribed him, but to little purpose: for he sunk gradually into such a lowness of Spirits, as often in a Manner deprived him of his mental Faculties, and at last rendered him incapable of performing his Duty, or even of reading the Letters of his Friends; and so trifling an accident as the dropping of a Tea-cup would flurry him as much as if a House had tumbled down.

The Physicians advised his native Air for his Recovery; and in *February*, 1761, he set out, with much reluctance, (believing he should never return) for *Bosworth*, along with some Relations. The Journey fatigued him to such a Degree, that upon his arrival, he betook himself to his Chamber, where he grew continually worse and worse, to the Day of his Death, *May* the 14th, in the fifty-first Year of his Age.

He left a Son and a Daughter; the former an Officer in the Royal Regiment of Artillery, at present in *America*. The King, at the Instances of Lord Viscount *Ligonier*, in consideration of Mr. *Simpson*'s great Merits, was graciously pleased to grant a Pension to his Widow, together with handsome Appartments adjoining to the Academy: A Favour never conferred on any before.

An Account of the Success of the Bark of the Willow in the Cure of Agues. By the Rev. Mr. Edmund Stone, *of* Chipping-Norton *in* Oxfordshire.

THERE is a Bark of an *English* Tree, which I have found by Experience to be a powerful Astringent, and very efficacious in curing aguish and intermitting Disorders.

About six Years ago, I accidentally tasted it, and was surprized at its extraordinary Bitterness; which immediately raised in me a Suspicion of its having the Properties of the Peruvian Bark.

My Curiosity prompted me to look into the Dispensatories and Books of Botany, and examine what they said concerning it; but there it existed only by Name. I could not find, that it hath, or ever had, any Place in Pharmacy, or any such Qualities as I suspected, ascribed to it by the Botanists.

However, I determined to make some Experiments with it; and, for this Purpose, I gathered that Summer near a Pound Weight of it, which I dried in a Bag, upon the Outside of a Baker's Oven, for more than three Months: at which Time I got it reduced to a Powder, by pounding and sifting after the Manner that other Barks are pulverized.

It was not long before I had an Opportunity of making trial of it; but, being an entire stranger to its Nature, I gave it in very small Quantities, I think about twenty Grains of the Powder at a Dose, and repeated it every four Hours between the Fits; but with great Caution and the strictest Attention to its Effects: The Fits were considerably abated, but did not entirely cease. Not perceiving the least ill Consequences, I grew bolder with it, and in a few Days encreased the Dose to two Scruples, and the Ague was soon removed.

It was then given to several others with the same Success; but I found it

it better anſwered the Intention, when a Dram of it was taken every four Hours in the Intervals of the paroxiſms.

I have continued to uſe it as a Remedy for Agues and intermitting Diſorders for five Years ſucceſſively and ſucceſsfully. It hath been given I believe to fifty Perſons, and never failed in the Cure, except in a few autumnal and quartan Agues, with which the Patients had been long and ſeverely afflicted; theſe it reduced in a great Degree, but did not wholly take them off; the Patient, at the uſual Time for the Return of his Fit, felt ſome ſmattering of his Diſtemper, which the inceſſant Repetition of theſe Powders could not conquer: it ſeemed as if their Power could reach thus far and no farther, and I did ſuppoſe that it would not have long continued to reach ſo far, and that the Diſtemper would have ſoon returned with its priſtine Violence; but I did not ſtay to ſee the Iſſue: I added one fifth Part of the Peruvian Bark to it, and with this ſmall Auxiliary it totally routed its Adverſary. It was found neceſſary likewiſe, in one or two obſtinate Caſes, at other Times of the Year, to mix the ſame Quantity of that Bark with it; but theſe were Caſes where the Patient went abroad imprudently, and caught cold, as a Poſt-chaiſe Boy did, who, being almoſt recoved from an inveterate Tertian Ague, would follow his Buſineſs, by which Means he not only neglected his Powders, but, meeting with bad Weather, renewed his Diſtemper.

One fifth Part was the largeſt and indeed the only Proportion of the Quinquina made Uſe of in this Compoſition, and this only upon extraordinary Occaſions: The Patient was never prepared, either by vomiting, bleeding, purging, or any Medicines of a ſimilar Intention, for the Reception of this Bark, but he entered upon it abruptly and immediately, and it was always given in Powders, with any common Vehicle, as Water, Tea, Small Beer, and ſuch like. This was done purely to aſcertain its Effects; and that I might be aſſured the Changes wrought in the Patient could not be attributed to any other Thing: Though, had there been a due Preparation, the moſt obſtinate Intermittents would probably have yielded to this Bark without any foreign Aſſiſtance: And, by all I can judge from five Years Experience of it upon a Number of Perſons, it appears to be a powerful Abſorbent, Aſtringent, and Febrifuge in intermitting Caſes, of the ſame Nature and Kind with the Peruvian Bark, and to have all its Properties, though perhaps not always in the ſame Degree. It ſeems likewiſe to have this additional Quality, *viz.* to be a ſafe Medicine; for I never could perceive the leaſt ill Effect from it, though it had been always given without any Preparation of the Patient.

The Tree, from which this Bark is taken, is ſtiled by *Ray*, in his Synopſis, *Salix, alba, vulgaris*, the common white Willow. *Hæc omnium nobis cognitarum maxima eſt, et in ſatis craſſam et proceram Arborem adoleſcit.*

It is called in theſe Parts, by the common People, the Willow, and ſometimes the *Dutch* Willow; but, if it be of a foreign Extraction, it hath been ſo long naturalized to this Climate, that it thrives as well in it as if it was in its original Soil. It it eaſily diſtinguiſhed by the notable Bitterneſs and the free running of its Bark, which may be readily ſeparated from it all the Summer Months whilſt the Sap is up. I took it from the Shoots of three or four Years Growth, that ſprung

from Pollard Trees, the Diameters of which Shoots, at their biggeſt End, were from one to four or five Inches: It is poſſible, and indeed not improbable, that this Cortex, taken from larger or older Shoots, or from the Trunk of the Tree itſelf, may be ſtronger; but I have not had Time nor Opportunities to make the Experiments, which ought to be made upon it. The Bark I had was gathered in the northern Parts of *Oxfordſhire*, which are chiefly of dry and gravelly Nature, affording few moiſt or moory Places for this Tree to grow in; and therefore, I ſuſpect that its Bark is not ſo good here as in ſome other Parts of the Kingdom. Few Vegetables are equal in every Place: The beſt and ſtrongeſt Muſtard-ſeed is gathered in the County of *Durham*; the fineſt Saffron-flowers are produced in ſome particular Spots of *Eſſex* and *Cambridgeſhire*; the beſt Cyder-apples grow in *Herefordſhire*, *Devonſhire*, and the adjacent Counties; the Roots of Valerian are eſteemed moſt medicinal, which are dug up in *Oxfordſhire* and *Gloceſterſhire*: And therefore why may not the *Cortex Salignus*, or *Cortex Anglicanus*, have its favourite Soil, where it may floriſh moſt, and attain to its higheſt Perfection? It is very probable that it hath; and perhaps it may be in the Fens of *Lincolnſhire*, *Cambridgeſhire*, *Eſſex*, *Kent*, or ſome ſuch like Situations; and, though the Bark, which grew in the County of *Oxford*, may ſeem in ſome particular Caſes to be a little inferior to the Quinquina, yet, in other Places, it may equal, if not exceed it.

The Powders made from this Bark are at firſt of a light Brown, tinged with a duſky Yellow, and the longer they are kept, the more they incline to a cinnamon or lateritious Colour, which I believe is the Caſe with the Peruvian Bark and Powders.

Experiments on the Effects of the Poiſon of the Rattle Snake. By Captain Hall.

IN South-Carolina, May 10, 1720, Captain Hall, having procured a fine healthful rattle-ſnake, about four feet long, did, with three or four gentlemen, and one Mr. Kidwell a ſurgeon, make ſome experiments on the effects of its poiſon.

They procured three cur-dogs, the largeſt not bigger than a common harrier; and the leaſt about the bigneſs of the largeſt ſized lap-dog, all of them ſmooth haired.

The ſnake being tied and pinned down to a graſs-plott, they took the largeſt of the dogs, which was a white one, and having tied a cord round his neck, ſo as not to ſtrangle him, another perſon held one end, while the captain held the other; the length was not more than four yards each way from the dog.

Immediately on their bringing the dog over the ſnake, he raiſed himſelf near two feet, and bit the dog, as he was jumping: the dog yelped, by which the captain perceived he was bitten; upon which he pulled the dog to him as faſt as he could, and perceived his eyes fixt, his tongue between his teeth, which were cloſe, his lips drawn up in ſuch a manner, as to leave his teeth and gums bare: in ſhort, the dog was quite dead in a quarter of a minute, as the by-ſtanders judged; but one perſon, beſides the captain, was of opinion it was in half that time. They could not ſee where the dog was bitten, nor obſerve any blood; upon which, ordering ſome hot water to ſcald the hair off, they could diſcover but

but one puncture, which looked of a bluiſh green colour a little round it; it was juſt between his fore leg and his breaſt, where, when his legs are extended, the hair is much thinner than in ſome other places.

Half an hour after the firſt bite, they took a ſecond dog, which was ſomewhat leſs, of a liver colour, and in like manner brought him over the ſnake, which in a very little time bit his ear, ſo that they all ſaw it; the dog yelped very much, and ſoon ſhewed the ſigns of being very ſick, holding the ear that was bit uppermoſt; he reeled and ſtaggered about for ſome time, then he fell down, and ſtruggled as if convulſed, and for two or three times got up, each time wagging his tail, though ſlowly, and attempting to follow a negro-boy, who uſed to make much of him. They put him into a cloſet, and ordered the boy to look after him.

About an hour after the ſecond was bitten, they took the third dog in like manner: the ſnake bit him on the right ſide of the belly, about two inches behind the long ribs; for they obſerved, he had drawn blood there. The dog, for about a minute, did not ſeem to be hurt; ſo they let him go, ſince they could get him again. For that day they put up the ſnake, imagining his poiſon was very near, if not quite, expended.

Two hours after the ſecond dog was bit, the negro-boy told them he was dead.

About an hour after Mr. Kidwell opened him, in order to examine the heart; but the captain could not perceive any remarkable difference between that and ſeveral others he had ſeen, where there was no poiſon in the caſe. Mr. Kidwell laid open the ſkull, and was of opinion that the brain was more red and ſwoln than any he had ever obſerved; and he told the captain a little while after, that the blood turned very black.

For that day they heard no more of the third dog which was bitten; but next morning the woman who owned him came to the captain, complaining of his cruelty in killing her dog; ſhe did not know when he died, but ſaid ſhe ſaw him at ſeven in the evening before, which was about three hours after he was bit, and that he was ſo ſick he could ſcarce wag his tail. None of theſe dogs were ſowln before they died.

On the 14th they got two dogs, both as big as common bull dogs: the firſt dog, which he bit on the inſide of his left thigh, died in half a minute exactly, in the opinion of two gentlemen who kept their watches in their hands all the while: there were two very ſmall punctures in his thigh, which looked livid, though no blood was drawn. This dog did not ſwell for four hours after he was dead.

The ſecond dog was bit about an hour after the firſt, on the outſide of his thigh, where they perceived the blood at two places: he ſoon ſickened, and died in four minutes.

They thought the ſnake's poiſon was not ſpent, ſo got a cat (for they could procure no more dogs) which he bit about an hour after, though the captain could not ſay where: the cat was very ſick, and they put her up in a cloſet; by ſome means the cat was let out in leſs than an hour and half after ſhe was bitten. Next morning early ſhe was found dead in the garden, and much ſwoln; ſo that nobody cared to examine or ſearch where ſhe was bit.

About a quarter of an hour after he had bitten the cat, he bit a hen twice; the hen ſeemed very ſick and drooping, and could no, or did not fly up to her uſual place of

rooſt among the reſt that night; but the next day ſhe ſeemed very well, and continued ſo till evening, when the captain ordered her to be killed, and her feathers ſcalded off; there were two punctures in her thigh, and a ſcratch on her breaſt over the craw, all which looked livid.

About a week after, having got a large bull-frog, they brought him over the ſnake as uſual, which he bit with a great deal of force; ſo that he ſeemed to faſten for a ſmall time: the frog died in two minutes or thereabouts.

In leſs than a quarter of an hour after he bit a chicken, which was hatched the February before, that died in three minutes; the captain could not ſay where it was bit, and he was at a loſs to try any farther experiments for a long time, for want of proper ſubjects.

About the middle of June the captain took the ſnake out according to cuſtom, and having procured a common black ſnake, not of the viper kind, about two feet and a half, or near three feet long, that was healthful, and juſt taken; he put them both together, and irritated them, ſo that they bit each other, and he perceived that the black ſnake had drawn blood of the rattle-ſnake, before he took them aſunder.

In leſs than eight minutes the black ſnake was dead, and he could not perceive the rattle-ſnake at all the worſe for it, or ſick.

On the laſt day of June he took the rattle-ſnake out to try whether if he bit himſelf it would not prove mortal to him. The captain hanged him in ſuch a manner that he was not above half his length on the ground, and with two needles at the end of a ſtick, one to prick, and the other to ſcratch, irritated him ſo much, that he ſoon bit himſelf, after having ſeveral times attempted to bite the ſtick: he then let him down, and he was quite dead in eight minutes, or thereabouts; but he is ſure it did not exceed twelve minutes.

A Gentleman upon cutting the ſnake into five pieces, gave them to a hog, the head part firſt, in ſight of ſeveral people: the hog eat up all the ſnake, and ten or twelve days afterwards, the captain ſaw the hog alive and healthful.

This was no more than what the captain had obſerved before; but doubted they had miſtaken ſome other ſnake for a rattle-ſnake: for being at the houſe of Mr. Charles Hart, he was ſhewn a ſnake, which a negro-boy told him he had killed juſt before; it was in three pieces, the head of it bruiſed into the ground: while the captain was looking on, a ſow that had pigs following her, came and eat it up very greedily.

The captain never heard ſhe was ſick for it, though he enquired, and about ten days after, he ſaw her in very good health. He has heard fifty relations of the ſame kind, and was informed, that thoſe hogs which feed in the marſhes will run after the common ſort of water-ſnakes, which are not poiſonous, and will feed on them greedily. And in Maryland in Auguſt 1717, he ſaw a hog eat up the head of a rattle ſnake juſt cut off, and while it was gaſping very dreadfully, and he was told it was a common thing, and it would do them no harm.

June 10, 1723, Mr. Tho. Cowper, who practiſes phyſic at Charles-Town, ſent the captain word, that he had procured a fine rattle-ſnake, which had been taken not above four days, about three feet and a half long, and that he deſigned to try whether he could ſave ſome of the dogs after the ſnake ſhould bite them. He provided a large quantity of Venice-treacle, or Mithridate, (the captain

captain could not be poſitive which) and divided it into two portions, each about two ounces, to one of them he put a large quantity of diaphoretic antimony.

The firſt dog which the ſnake bit on the inſide of the thigh, died ſo ſoon, viz. in about half a minute, that they could not get the portion (which was that without the antimony) down his throat ſoon enough to expect it could take effect.

Upwards of an hour after, the ſecond dog was bitten by the ſnake, and had two punctures or holes in the fleſhy part of the inſide of his left fore leg, which bled more than any the captain had obſerved before: they immediately got down his throat that preparation with antimony; he ſoon grew very ſick, and ſtrove to vomit, but brought up very little, if any at all, he frothed at the mouth, and bit at the graſs, which he champed as if he were mad, and indeed they were all afraid of him: they therefore put him into a room, and kept him there till next morning, where the captain ſaw him, as he thought, recovered. They throwed him ſome meat, which he eat; ſo letting him out, he went home. About a month after that the dog's pile came off, and his maſter killed him, being ſo ugly to look at; for he told the captain he looked like (as he called it) a leprous perſon The captain never heard that this dog ſwelled.

The third dog the ſnake bit was a ſhaggy ſpaniel, about an hour and a quarter after the ſecond. He was bitten on the foremoſt part of his right ſhoulder, as they perceived by the blood. The dog ſeemed to bite at the place himſelf, and was very ſick for about two or three hours, but without any means or application he recovered, and the captain never heard he was ſick afterwards.

The receipt of a cure for poiſon, and the bite of a rattle-ſnake, diſcovered by a negroe ſlave in Carolina, for which the general aſſembly thought fit to purchaſe his freedom, and grant him an allowance of 100l. per ann. *may not be unacceptable; we therefore give it to our readers as printed in the Carolina Gazette.*

The Negroe Cæſar's *Cure for Poiſon.*

TAKE the roots of plantane and wild hoare-hound, freſh or dried, three ounces, boil them together in two quarts of water, to one quart, and ſtrain it; of this decoction let the patient take one third part three mornings faſting ſucceſſively, from which if he finds any relief, it muſt be continued, 'till he is perfectly recovered: On the contrary, if he finds no alteration after the third doſe, it is a ſign that the patient has either not been poiſoned at all, or that it has been with ſuch poiſon as Cæſar's antidotes will not remedy, ſo may leave off the decoction.

During the cure, the patient muſt live on a ſpare diet, and abſtain from eating mutton, pork, butter, or any other fat or oily food.

N. B. The plantane or hoare-hound, will either of them cure alone, but they are moſt efficacious together.

In ſummer, you may take one handful of the roots and branches of each, in place of three ounces of the roots of each.

For drink, during the cure, let them take the following.

Take of the roots of golden-rod, ſix ounces, or in ſummer two large handfuls of the roots and branches together, and boil them in two quarts of water to one quart, (to which alſo may be added, a little hoare-hound and ſaſſafras) to this decoction,

decoction, after it is ſtrained, add a glaſs of rum or brandy, and ſweeten it with ſugar, for ordinary drink.

Sometimes an inward fever attends ſuch as are poiſoned, for which he orders the following.

Take a pint of wood aſhes and three pints of water, ſtir and mix them well together, let them ſtand all night, and ſtrain or decant the lye off in the morning, of which ten ounces may be taken ſix mornings following, warmed or cold, according to the weather.

Theſe medicines have no ſenſible operation, tho' ſometimes they work in the bowels, and give a gentle ſtool.

The ſymptoms attending ſuch as are poiſoned, are as follows.

A pain in the breaſt, difficulty of breathing, a load at the pit of the ſtomach, an irregular pulſe, burning and violent pains of the viſcera above and below the navel, very reſtleſs at night, ſometimes wandering pains over the whole body, a reaching and inclination to vomit, profuſe ſweats, (which prove always ſerviceable) ſlimy ſtools, both when coſtive and looſe, the face of a pale and yellow colour, ſometimes a pain and inflammation of the throat, the appetite is generally weak, and ſome cannot eat any; thoſe who have been long poiſoned, are generally very feeble, and weak in their limbs, ſometimes ſpit a great deal, the whole ſkin peels, and likewiſe the hair falls off.

Cæſar's *cure for the bite of a rattle-ſnake.*

Take of the roots of plantane or hoare-hound, (in ſummer roots and branches together) a ſufficient quantity, bruiſe them in a mortar, and ſqueeze out the juice, of which give, as ſoon as poſſible, one large ſpoonful; if he is ſwelled you muſt force it down his throat; this generally will cure; but if the patient finds no relief in an hour after, you may give him another ſpoonful, which never fails.

If the roots are dried, they muſt be moiſtened with a little water.

To the wounded may be applied a leaf of good tobacco moiſtened with rum.

MATHEMATICAL CORRESPONDENCE.

To the AUTHOR *of the* GENERAL MAGAZINE.

SIR,

IN order to terminate the diſpute between Mr. George Brown and me, with preciſion, I do here (with your leave) publickly invite him, to demonſtrate, how his ſolution to your 16th queſtion (at p. 402.) proves my proceſs (at p. 341.) to be falſe; becauſe, his bare aſſertion, at p. 447, (is not an intuitive truth, therefore,) is no proof.

And I likewiſe intreat him to prove, how the words of the 16th queſtion "a certain given line:" and his words, at p. 402, "a certain right line to be determined;" (or, a line that is entirely unknown,) are ſynonymous; or let him ſhew, how theſe two ſets of words are preciſely deſcriptive of the ſame thing; or ſignify the ſame idea; becauſe if he fails therein, it will be manifeſt, that he has not only interpolated the data, but on account of that interpolation, charged me with being miſtaken: how creditable ſuch a procedure is, your readers may judge.

But, if Mr. Brown ſhould juſtly own, that an ellipſis cannot be determined from your 16th queſtion without inveſtigating (p) what the queſtion calls "a certain given line," ſhould have been expreſſed, a line determinable from the problem, (as if it was really an unknown quantity;) then,

then, the anſwer would be, that the queſtion is manifeſtly defective, (notwithſtanding that delicate epithet beſtowed thereon by himſelf,) which would ſerve, not only to refute Mr. Brown, but alſo proves the truth of what I have advanced, both in my laſt letter, and above.

Far be it from me to pretend to infallibility; but to be charged with error, where none appears, is certainly very unfair.

Smithfield. Tho. Todd.

To the Proprietor of the General Magazine.

By inſerting the following letter in your next Magazine, you will greatly oblige,
Your moſt humble ſervant,
GEO. BROWN.

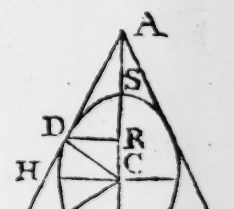
IN the laſt Magazine p. 445 and 6, the ingenious Mr. Todd, ſeems much diſpleaſed at my ſaying, that he is miſtaken in his ſolution, at p. 341, General Magazine for July laſt, that charge I declare to be juſt, as will appear from what has been ſaid already.—He ſays that I have aſſumed the perpendicular of the triangle to coincide with the tranſverſe axis of the ellipſis; this charge is falſe and ungenerous, as will evidently appear from my equation.—He ſays that my ſolution is only a particular caſe of his equation. To anſwer this, I ſhall beg leave to remind him, that per queſtion the curve muſt be an ellipſis, and no other curve whatſoever, for which reaſon, his ſolution may be very juſtly called no ſolution, or falſe, becauſe of the lumber with which his ſolution abounds. — Now by means of my ſolution he hath lopt off the lumber in his ſolution; this proceeding will afford him no credit. — I believe that Mr. Todd cannot tell, whether the 16th queſtion will be uſeleſs or not, and but few will take his word; neither is that queſtion ſo obſcure and ambiguous, as he would fain make the world believe, my ſolution at p. 402, proves that charge to be falſe, and let Mr. Todd ſay what he will againſt that queſtion, I ſay, that it is new, and a very curious queſtion, *i. e.* an original queſtion, becauſe it cannot be anſwered from any author I have ſeen.—The beginning of Mr. Todd's ſolution (vide p. 341) ſufficiently ſhews, that he did not underſtand that curious queſtion, then how can any man expect, that his ſolution ſhould be true.—The whole affair lies here; that Mr. Todd finding himſelf fairly foiled, and to extricate himſelf, he cannot; then he falls into a paſſion, and loads that curious queſtion with ſcurrility. &c. the whole of Mr. Todd's paltry defence, and all that he can ſay; his ſolution will diſgrace him.

Tree-Rope-Walk, Portſmouth-Common, Oct. 13, 1764.

*** *We ſhould be glad if theſe ingenious Gentlemen would agree to terminate this diſpute as it begins to grow too defuſive for our limits.*

MATHEMATICAL QUESTIONS, *anſwered.*

Queſt. 35. *Anſwered by Mr.* Iſaac Dalby, *of* Quarhouſe, *in* Glouceſterſhire.



THE ſides of the triangle will be biſected by the points of contact. Therefore, from the point of contact D, draw the ſemi ordinate D R; and put D R $= x$; C G $= y$: then will C R $= \sqrt{P^2 - x^2}$ (P being $=$ D C); and putting $,7854 = b$, we have H C $= \frac{A}{4by}$ (A being the Area of the ellipſis); then per property of the Ellipſis, $y^2 : \left(\frac{A}{4by}\right)^2 : : \overline{y + \sqrt{P^2 - x^2}} \times \overline{y - \sqrt{P^2 - x^2}} = y^2 - P^2 + x^2 : x^2$, whence $x^2 y^2 = \left(\frac{A}{4by}\right)^2 \times y^2 - P^2 + x^2$. But per ſim. triang. $\overline{P^2 - x^2}^{\frac{1}{2}} : P : : P : \frac{P^2}{\overline{P^2 - x^2}^{\frac{1}{2}}} = CA = CB$. Again, $\overline{P^2 - x^2}^{\frac{1}{2}} : x : : P : \frac{Px}{\overline{P^2 - x^2}^{\frac{1}{2}}} = DA$,

$= D A$, whence we have $\frac{P4}{P^2 - x^2} - y^2 + y + \overline{\frac{P^2}{P^2 - x^2}^{\frac{1}{2}}}^2 = \frac{4 P^2 x}{P^2 - x^2}$, now from this equation, and $x^2 y^2 = \overline{\frac{A}{4 b y}}^2 \times \overline{y^2 - P^2 + x^2}$, the value of x and y may be found.

This Question was also answered Mr. J. Barber, *and by the Proposer Mr.* T. Barker.

Queſt. 36. *Answered by Mr.* John Barber *the Proposer.*

FIRST by writing $\frac{y \ddot{x}}{\dot{x}}$ for its equal $\ddot{y}$, we have (after reduction) $20 x^4 \dot{x} + y \dot{x} = 6 \dot{y}$. Put $c = 20$, and $a = 6$, then by proceeding according to article 265 of Simpſon's flux. we have $y \dot{x} = a \dot{y}$, and $\frac{x}{a} =$ Hyp. Log. of $\frac{y}{d}$, (d being ſome conſtant quantity) hence $y = a M^{\frac{x}{a}}$ (M being $= 2{,}71828$ the Number whoſe Hyp. Log. is unity.) Again by ſubſtituting the exponent of n (4) into the general expreſſion, page 293 of the ſame author, we have $-c \times \overline{x^4 + a x^3 + 12 a^2 x^2 + 24 a^3 x + 24 a^4}$, hence $y = -c \times \overline{x^4 + a x^3 + 12 a^2 x^2 + 24 a^3 x + 24 a^4} + d M^{\frac{x}{a}}$, which corrected according to the conditions ſpecified in the Problem, we have, $y = 23040008 M^{\frac{x}{6}} - 6 x^4 - 120 x^3 - 2880 x^2 - 1152000 x - 23040000$.

Solutions to this Queſtion were received from Mr. G. Brown, J. Barber, *and Mr.* T. Barker.

Queſt. 37. *Answered by Mr.* Thomas Barker, *of* Wiſſet, *in* Suffolk.

FIRST $\frac{x^9 + y^9}{x^3 + y^3} = x^6 - x^3 y^3 + y^6$; Now put $P = x y$, $a =$ Sum of the required numbers, and $b =$ the ſum of the ninth powers; then we have $\frac{b}{a^3 - 3 a P} = a^6 - 6 a^4 P + 9 a^2 P^2 - 3 P^3$, this equation ſolved, P is had $= 2.290\,8163$, &c.

Now put $2 a =$ ſum, and $2 z =$ differences, then we have $\overline{a + z} \times \overline{a - z} = P$, Hence $z = \overline{a^2 - P}^{\frac{1}{2}} = \sqrt{-0.048163}$, which ſhews the queſtion (in my humble opinion) to be impoſſible in theſe numbers.

This Queſtion was ſolved by Meſſrs. A. Wood, B. Mortimer, *and* Analyticus.

Queſt. 38. *Answered by Mr.* Thomas Todd, *the Proposer.*

BY dividing the equat. by $\overline{\dot{y}^2 + \dot{x}^2}^{\frac{1}{2}}$, gives $\dot{y} \sqrt{\dot{y}^2 + \dot{x}^2} + \frac{y \dot{y} \ddot{y} + y \dot{x} \ddot{x}}{\overline{\dot{y}^2 + \dot{x}^2}^{\frac{1}{2}}} = 2 \dot{x} \dot{y} + x \ddot{y} + y \ddot{x}$, whoſe fluents are $y \sqrt{\dot{y}^2 + \dot{x}^2} = x \dot{y} + y \dot{x}$; which ſquared, gives $y^2 \dot{y}^2 + y^2 \dot{x}^2 = x^2 \dot{y}^2 + 2 y x \dot{x} \dot{y} + y^2 \dot{x}^2$; expunging the contradictory terms, and dividing the whole by $\dot{y}$, gives $y^2 \dot{y} = x^2 \dot{y} + 2 y x \dot{x}$, whoſe fluents are $\frac{y^3}{3} = y x^2$; hence, $y = x \sqrt{3}$, which corrected by the conditions of the queſtion, becomes $y = n + \overline{x - z} \times \sqrt{3}$, for the required relation of x and y.

The ſame answered by Mr. Geo. Brown, *of* Portſmouth Common.

PUT $s y = x$, then will $s \dot{y} = \dot{x}$, and $s \ddot{y} = \ddot{x}$, which being ſubſtituted in the given equation we ſhall have $\sqrt{1 + s^2} \times \dot{y}^2 + y \ddot{y} = 2 s \times \dot{y}^2 + y \ddot{y}$, whoſe fluent is

is $\sqrt{1+s^2} \times \frac{y^2}{2} = s y^2 = x y$, then will $y\sqrt{1+s^2} = 2x$ and $y = x\sqrt{3}$; but per queſtion, when $x = m$, $y = n$ $\therefore y = n + x - m \times \sqrt{3}$, the relation of x and y required. Q. E. I.

New QUESTIONS *to be anſwered.*

Queſt. 45. *By Mr.* Hook Clerk.

GIven $x^2 + y^2 = 410$, $y x^2 = 931$ } Quere x and y?

Queſt. 46. *By Mr.* William Gough, *of* Elleſmeer, *in* Shropſhire.

GIVEN the ſum of the cubes of two numbers = 1064, and the greater is to the leſs as 5 to 2. Quere the numbers?

Queſt. 47. *A Problem. By* Sangrado.

FROM two given points to inflect two right lines in a given ratio, and ſo that a line drawn from one of the given points to the inflected line, ſhall make a given angle, and the rectangle contained under them be of a given magnitude.

Queſt. 48. *By Mr.* J. Prieſtley, *of* Halifax.

A Cylinder of iron 14 inches long paſſes through the middle of a cylinder of fir 20 inches long, and 12 inches diameter, in ſuch manner that their axes cut each other at right angles. It is required to find the diameter of the iron cylinder, when it, and the wooden one together, have the ſpecific gravity of water?

Queſt. 49. *By Mr.* Geo. Brown, *Teacher of the Mathematics, on* Portſmouth Common.

SUppoſe a right cylinder to ſtand with its baſe upon a horizontal plane, the height of which is five feet, and diameter eighteen inches. It is required to cut the ſaid cylinder by a plane paſſing through the extremity of its upper baſe, ſo that the greater part ſhall juſt ſupport itſelf from falling.

Queſt. 50. *By Mr.* T. Allen, *of* Spalding.

TO find the ſum of the infinite ſeries $\frac{1}{1.2.v} - \frac{1}{3.4.v^3} + \frac{1}{5.6\,v^5} - \frac{1}{7.8.v^7}$ +, &c. where v is ſuppoſed to denote any poſitive integer.

Apparent Times of the Eclipſes of Jupiter's *Satellites, which will happen in* November, 1764, *computed, from New Tables, to the Meridian of the* ROYAL OBSERVATORY *at* GREENWICH.

I. Satellite. Immerſions.				II. Satell. Imm.				III. Satellite			
D.	H.	M.	S.	D.	H.	M.	S.	D.	H.	M.	S.
1	18 *	34	56	24	8 *	41	2	3	0	40	33
3	13	3	20	26	13 *	8	51	6	13 *	58	8
5	7	31	35	28	7	36	43	10	3	15	12
7	1	59	55	30	2	4	32	13	16 *	32	16
8	20	28	13					17	5	48	59
10	14 *	56	19					20	19	5	34
12	9 *	24	43					24	8 *	22	23
14	3	52	57					27	9	38	43
15	22	21	3								
17	16 *	49	10								
19	11 *	17	14								
21	5	45	29								
23	0	13	6								

None but thoſe marked * are viſible at *Greenwich*.

III. Satellite			
D.	H.	M.	S.
7	9 *	53	21 I.
7	12 *	51	31 E.
14	13 *	50	58 I.
14	16 *	50	1 E.
21	17 *	47	57 I.
28	21	44	20 I.

IV. Satellite.			
D.	H.	M.	S.
12	11 *	42	29 I.
12	15 *	3	23 E.
29	5	38	32 I.
29	9 *	5	0 E.

— The firſt day *Venus* will be very near ρ in *Virgo*.
The eighth day ſhe will almoſt touch n in *Virgo*.
The ninth day *Saturn* will be in oppoſition to the *Sun*.
The twentieth day *Venus* will be near θ in *Virgo*.

ERRATUM.

In Mr. Todd's Letter, p. 445, line 4, for to *coincide with*, read, *to be in the direction of.*

P. 446, line 3, for $\frac{a^2}{b}\sqrt{\frac{a-b}{a+b}}$, read $\frac{a^2}{b}\sqrt{\frac{a+b}{b-b}}$ = ſemi, &c.

Solution to queſtion 34, line 6, for B A C^3, read A C^3.

Ditto 33, line 4, for $2cy\sqrt{x^2+y^2}$, read $2cy\sqrt{x^2+y^2}$.

POETRY.

An Epiſtle from GEORGE HIND, *Clerk of the Pariſh of* M—rd—n *in* Dorſet, *to the abſent Vicar Mr.* ——.

MEaſter, an't pleaſe you, I do zend
Theſe letter to you as a friend;
Hoping you'll pardon the inditing,
Becaz I am not us'd to writing;
And that you will not take unkind,
A word or zo, from poor George Hind.
For I am always in the way,
And needs muſt hear what people zay;
Firſt of the houſe they make a joke,
And zwear the chimnies never ſmoke.
Now the occaſion of theſe jeſts,
As I do think, were zwallows neſts;
Which chanc'd but t'other day to val
Into the parlour, zut and aal.
Bezide, the people not a few,
Begin to grumble much at you,
For leaving of them in the lurch,
And letting ztrangers ſerve the church,
Who are in heaſt to go agen,
Zo we han't zung the Lord knows when.
And for their preaching (I do know
As well as moſt) 'tis but zo, zo.
Zure if the call you had were right,
You'd not vorſake our neighbours quite:
But I do vear you've zet your aim on
Naught in the world but vilthy mammon.
The people, when the church is o'er,
Do goo a ſtraggling o'er the moor,
A Zundays there is zuch a hooting!
And the young 'ſquires do goo a zhuting.
If I had never learn'd a letter,
I think, that I coud tell 'em better.
But it don't matter what I talk
To them, or any other volk:
Of all I zay they take no heed,
Meaſter, twon'd grieve you, if you zee'd,
The boys are come to zuch a paſs,
Theyv'e broken ev'ry pane of glaſs.
If you do go the orchard round,
There's not a quodling to be found.
I think there's not a ſoul that's living
Minds the commandment againſt thieving.
Before they're ripe, the walnut-tree
Has not a walnut you can zee.
Now theſe the boys cou'd never get,
Becaz they have no kernels yet;
Zome ſay, that in a zartain place,
They've pickled them to put in zauce;
I'm zure to zave them I was willing,
Zome years they've yielded vorty ſhilling;
I'm zorry I'm to write a letter,
Zo full of news that is no better;
But 'twould diſpleaſe you to conceal
Whatever happens, good or ill.
Zo I will tell you one thing more,
Which when I zee'd did grieve me ſore.
The pars'nage houſe, that look'd ſo tight,
Upon the roof is naked quite:
The wind has ſtript the thatch away,
Zo it rains in both night and day.
Theſe things unto my mind did bring,
The zong of Deb'rah which we zing,
Againſt a man (as we read there)
"*The ſtars did in their courſes war:*"
But God forbid that ſuch diſaſter
Shou'd e'er befal my rev'rend meaſter.
Zo hoping that I han't been rude,
I think 'tis time for to conclude,
Deſiring you will ſtill be kind
To M—rd—n, your friend George H—d.

P. S. This at the ale-houſe in our town,
On Zunday night I did write down:
And Mrs. M—rt—m—r do join
Her humble Zervice, Zir, to mine.
Wiſhing, if it ſo pleaſe the Lord,
That you to us may be reſtor'd.
I for my part wou'd quit the place,
To have you come again in peace:
And if the biſhop wou'd conſent
When I from M—rd—n clerkſhip went,
At * M—dd—ngt—n to make me curate,
I'd do the duty —— juſt at your rate,
Nor aſk you more than half the price,
Which wou'd another man ſuffice ——
Bezide that I cou'd teach the ringers,
And be a meaſter to the zingers;
So you'll conſider my requeſt,
And God direct you for the beſt.

Natur

* *A town in Wilts where the vicar reſided.*

Nature and Fortune, to the E— of Ch—ld.

NAture and Fortune blithe and gay,
To paſs an hour or two,
In frolick mood agreed to play
At *What ſhall this man do?*
Come, I'll be judge then, Fortune cries,
And therefore muſt be blind;
Then whipt a napkin round her eyes,
And ty'd it faſt behind.
This done ſhe ſtump'd upon her own
And loll'd on Nature's knees:
So courtiers cringe; but make the throne
A pillow for their eaſe.
Nature had now prepar'd her liſt
Of names on ſcraps of leather,
Which roll'd, ſhe gave them each a twiſt,
And huſſed them together.
Thus mixt, which ever came to hand,
She very ſurely drew:
Then bade her ſiſter give command,
For what that man ſhould do.
'Twould almoſt burſt one's ſides to hear,
What ſtrange commands ſhe gave;
That C——r ſhould the laurel wear,
And C——e an army have.
At length when *Stanhope*'s* name was come,
Dame Nature ſmil'd, and cry'd,
Now tell me, ſiſter, this man's doom,
And what ſhall him betide?
That man, ſaid Fortune, ſhall be one
Bleſt both by you and me: ————
Nay, then, quoth Nature, let's have done;
Siſter, I'm ſure you *ſee*.

An Anatomical Epitaph *on an* Invalid. *Written by* himſelf.

HERE lies an head that often ach'd,
Here lie two hands that always ſhak'd;
Here lies a brain of odd conceit,
Here lies an heart that often beat;
Here lie two eyes that daily wept,
And in the night but ſeldom ſlept;
Here lies a tongue that whining talk'd,
Here lie two feet that feebly walk'd;
Here lie the midriff and the breaſt,
With loads of indigeſtion preſt;
Here lies the liver, full of bile,
That ne'er ſecreted proper chyle;
Here lie the bowels, human tripes,
Tortur'd with wind and twiſting gripes;
Here lies that livid dab, the ſpleen,
The ſource of life's ſad tragic ſcene,
That left ſide weight that clogs the blood,
And ſtagnates nature's circling flood;
Here lie the nerves, ſo often twich'd
With painful cramps and poignant ſtitch;
Here lies the back oft' rack'd with pains,
Corroding kidneys, loins, and reins;
Here lies the ſkin per ſcurvy fed,
With pimples and eruptions red.
Here lies the man from top to toe,
That fabrick fram'd for pain and woe;
He catch'd a cold, but colder death
Compreſs'd his lungs, and ſtopt his breath;
The organs could no longer go,
Becauſe the bellows ceas'd to blow.
Thus I diſſect this honeſt friend,
Who ne'er till death was at wit's end;
For want of ſpirits e'er he fell,
With higher ſpirits let him dwell,
In future ſtate of peace and love,
Where juſt men's perfect ſpirits move.

The Bachelor's *laſt* Shift.

COME, ſweet fifteen; come thirty-five;
Come, miſſes, who your charms ſurvive;
Come widows, of a ſocial vein,
Who live in hope to try again;
Come honour'd madam; come plain goody;
Of aſpect, ſallow, pale, or ruddy,
(With me, good ſenſe, good wit, good-nature,
Will well ſupply defect of feature)
Come all and liſten to my cry;
A Bachelor! ah, muſt I die?
No longer I my cares diſſemble,
At thirty-five believe I tremble:
And here expect a bill of fare,
Which charity is wiſh'd to ſpare;
—Of conſtitution, firm and hearty,
I love my country, laugh at party;
Of temper—chearful, kind and pliant;
Not quite a dwarf, though far from giant:
Of wit—none think they lack their ſhare;
Of features—almoſt—regular;
Of wordly means—enough for one;
No pedant, nor to books unknown;
Not deſtitute of ſigns of grace,
Can ſhew at church, a thoughtful face;
All forms of cruelty deteſt,
And hate the rancour of a jeſt;
And pleas'd when merit finds its meed;
Nor envy if a knave ſucceed:
Mammon, I ſeek not, nor refuſe,
Which pride and ignorance abuſe;
Peace, competence, be ſtill in ſight,
Three meals a day, ſound ſleep at night;
—Theſe (ladies) are my chief pretenſions,
Which ponder well, I hate inventions:
Let (pride and coquetry apart)
Each proper female aſk her heart,
Should that incline, may that fair hand,
Her humble ſervant's fate command.

A deſponding Bachelor.

* *Lord C——ſt——d.*

† *The learned, facetious and rev. Wm. Goodwin, late fellow of Eaton College, and vicar of St. Nicholas in Briſtol.*

An Ænigma. To the Ladies.

FROM orient climes, my native home,
To Britain, I, a ſtranger, come,
Poſſeſt of ev'ry charm that might
Give entertainment, and delight
The fair; whoſe gen'rous hearts I won,
(As foreigners have ever done.)
And tho' there be of t'other ſect
A few which ſhew me much reſpect;
Yet candidly confeſs, I owe,
Ladies, my preſent hight to you:
And care not for the wit, or ſage,
So I retain your patronage.
I'm fragrant as the breath of morn,
And verdant as the flow'ry lawn;
And what is ſtrange, yet wond'rous true,
I'm alſo of a ſable hue.
'Tis mine to chaſe the dreary hyp,
The cheek vermil, and ruby lip,
And ev'ry lively grace do ſhew,
What you to my benevolence owe.
In fine I'm ſo familiar grown,
You're ſo to my aſſiſtance prone,
That if I miſs, ye yawn and lour,
As if you'd 'roſe before your hour.
More might be ſaid: but think I hear
The witty *Stow*, or *Marbury*'s fair,
Begin to cry, 'tis paltry ſtuff,
I think the blockhead's ſaid enough.

Blackman-ſtreet. *J. H.*

ÆNIGMA.

AS I'm a favourite with both young and old,
For appearing herein ſhall I be too bold?
Or ſhall I that's careſs'd in town and in city
Be thought a half wit, that outwits the moſt witty?
Oh! that were enough for to fet me a fretting,
But that I'll not do; for I'm daily a getting:
Sirs I know thouſands love me; therefore I'll not grieve,
For love and a fortune I do daily receive.
If my age, or my ſize, you'd have to be ſhewn,
That I'll poſtpone; I'm a thing that's well known:
Appear as I will, I can ſcarce wear diſguiſe,
Therefore my dear readers be not in ſurprize,
Now this I will tell you, I do through Britain range;
Through all other nations, to none am I ſtrange;
Yea on the wide ocean I'm oft to be ſeen,
When Sol's in full luſtre, and the Welkin's ſerene:
Then each jolly ſailor, ſome hours to waſte,
Will into my ſervice inſtantly haſte.
In ſtreets and in taverns I moſtly appear,
But fly church and court, there's no room for me there;
Yet by church-men and courtiers I am careſs'd,
And into my ſervice many are preſs'd;
Pretty maſters and miſſes do of me partake;
And into ſtrong caſtles I often do break:
I'm as ſtrange an intruder as any on earth,
And as great a deceiver as ever had birth.
Fam'd Pruſſia's great monarch, as the news inform'd me,
Said I in his dominions no longer ſhould be;
It alſo inform'd me ſome Britons combin'd,
T' introduce a new order to have me refin'd!
Ah Britons! ſure it wou'd add to each of your ſtation
If I were baniſh'd quite throughout the whole nation:
But hold, my dear author,—your readers deſire
To tell me my name; which is all I require.

A List of New Books and Pamphlets.

1. INDEPENDENCY, a Poem. Addreſs'd to the Minority, by *C. Churchill.* 2s. 6d. *Almon.*

The prolific genius of our author will ſcarce allow time for the public converſation to cool about his laſt piece, before it calls off our attention to a new one. The Poem now before us, is not perhaps ſo ſharply pointed as many of his preceeding ones; but it abounds with ſeveral noble ſentiments and ſpirited reflections. There is beſides an admirable pleaſantry in ſome parts of it, as we ſhall point out in the progreſs of our remarks.

The author begins with ſetting forth the happineſs of a free and independent *Bard*; and obſerves, that

When, ſweeping onward with her peacock's tail,
Quality, in full plumage, paſſes by;
He views her with a fix'd, contemptuous eye,
And mocks the puppet, keeps his own dear ſtate,
And is above converſing with the great.

He next exclaims againſt thoſe poets, who

Have ſtoop'd to proſtitute their venal pen
For the ſupport of great, but guilty men,
Have made the Bard, of their own vile accord,
Inferior to that thing we call a Lord.

His

His indignation now leads him to enquire,

What is a Lord? doth that plain, ſimple word
Contain ſome magic ſpell? as ſoon as heard,
Like an alarum bell on night's dull ear,
Doth it ſtrike louder, and more ſtrong appear
Than other words? . . . . . &c.

After ſome reflections concerning the inequality between a poet and mere man of title, our author proceeds to determine the queſtion in a judicial manner:

A Bard—a Lord—let Reaſon take her ſcales,
And fairly weigh thoſe words, ſee which prevails,
Which in the ballance lightly kicks the beam,
And which by ſinking we the victor deem.
'Tis done, and Hermes, by command of Jove,
Summons a ſynod in the ſacred grove . . . .
. . . . Reaſon takes her ſtand
Juſt in the midſt, a ballance in her hand,
Which o'er and o'er ſhe tries, and finds it true . . . . .

Two perſonages are now ſuppoſed to come in, in order to have their merits weighed, whoſe figures are moſt humorouſly contraſted to each other.

The firſt was meager, flimſy, void of ſtrength,
But nature kindly had made up in length,
What ſhe in breadth denied; erect and proud,
A head and ſhoulders taller than the croud,
He deem'd them pygmies all; looſe hung his ſkin
O'er his bare bones; his face ſo very thin,
So very narrow, and ſo much beat out,
That phyſiognomiſts have made a doubt,
Proportion loſt, expreſſion quite forgot,
Whether it could be called a face or not;
At end of it, however, unbleſs'd with beard,
Some twenty fathom length of chin appear'd;
With legs, which we might well conceive that fate
Meant only to ſupport a ſpider's weight,
Firmly he ſtrove to tread, and with a ſtride
Which ſhew'd at once his weakneſs and his pride,
Shaking himſelf to-pieces, ſeem'd to cry,
Obſerve good people, how I ſhake the ſky.

We ſhall not pretend to determine, whether this firſt figure, *ſo long, ſo lean, ſo lank, ſo bony*, be drawn after the life, or whether it be only an ideal creation of our poet's fancy.

In his right hand a paper did he hold,
On which at large, in characters of gold,
Diſtinct, and plain for thoſe who run to ſee,
Saint Archibald had wrote L, O, R, D.
This, with an air of ſcorn, he from afar
Twirl'd into Reaſon's ſcales, and on that bar,
Which from his ſoul he hated, yet admir'd,
Quick turn'd his back, and as he came retir'd.
The Judge to all around his name declar'd;
Each Goddeſs titter'd, each God laugh'd,
Jove ſtar'd,
And the whole people cried, with one accord,
Good Heaven bleſs us all, is that a Lord!

As to the ſecond figure it is manifeſt at firſt ſight to all who perſonally know our author, who ſat for it; and we cannot but be heartily delighted with the pleaſantry of his thus exhibiting himſelf to public view at full length:

Such was the firſt—the ſecond was a man,
Whom Nature built on quite a diff'rent plan;
A *bear*, whom from the moment he was born,
His dam deſpis'd, and left unlick'd in ſcorn.
Broad were his ſhoulders, and from blade to blade
A H—— might at full length have laid;
Vaſt were his bones, his muſcles twiſted ſtrong,
His face was ſhort, but broader than 'twas long,
His features, tho' by Nature they were large,
Contentment had contriv'd to overcharge
And bury meaning, ſave that we might ſpy
Senſe low'ring on the penthouſe of his eye;
His arms were two twin oaks, his legs ſo ſtout
That they might bear a manſion-houſe about,
Nor were they, look but at his body there,
Deſign'd by Fate a much leſs weight to bear.
O'er a brown caſſock, which had once been black,
Which hung in tatters on his brawny back,
A ſight moſt ſtrange, and aukard to behold,
He threw a covering of blue and gold.
Juſt at that time of life, when man by rule,
The fop laid down, takes up the graver fool,
He ſtarted up a fop, and, fond of ſhew,
Look'd like another Hercules, turn'd beau.
A ſubject met with only now and then,
Much fitter for the pencil than the pen;
Hogarth would draw him (Envy muſt allow)
E'en to the life, was Hogarth living now.
With ſuch accoutrements, with ſuch a form,
Much like a porpoiſe juſt before a ſtorm,
Onward he roll'd; a laugh prevail'd around,
E'en Jove was ſeen to ſimper at the ſound

(Nor

(Nor was the cauſe unknown, for from his youth
Himſelf he ſtudied by the glaſs of Truth)
He join'd their mirth, nor ſhall the Gods condemn
If, whilſt they laugh'd at him, he laugh'd at them.
Judge Reaſon view'd him with an eye of grace,
Look'd thro' his ſoul, and quite forgot his face,
And, from his hand receiv'd, with fair regard
Plac'd in her other ſcale the name of Bard.

The concluſion of the trial is, that Reaſon
——with equal hand her ſcales held out,
Nor did the cauſe one moment hang in doubt,
She held her ſcales out fair to public view;
The *lord*, as ſparks fly upwards, upwards flew,
More light than air, deceitful in the weight;
The bard, preponderating, kept his ſtate,
Reaſon approv'd, and with a voice, whoſe ſound
Shook earth, ſhook heaven, on the cleareſt ground
Pronouncing for the bards a full decree,
Cried—Thoſe muſt honour them, who honour me. . . . .

We purpoſely paſs over the intermediate parts of the poem, (in which the Author deſcribes what was formerly true nobility, ſhews the difference between ancient and modern patrons, decries the ſervility of depending bards, and extolls the contrary character, &c. &c.) becauſe we would not be thought to tranſcribe more than will ſerve to give our readers a reliſh and deſire for the whole. From proving the ſweets of Independence to Bards, our author at length is led to break out into the following apoſtrophe.

Hail Independence—by true reaſon taught,
How few have known, and priz'd thee as they ought. . . . .

After mentioning upon what accounts, he proceeds—

Hail, Independence—tho' thy name's ſcarce known,
Tho' thou, alas! art out of faſhion grown,
Tho' all deſpiſe thee, I will not deſpiſe,
Nor live one moment longer than I prize
Thy preſence, and enjoy; by angry fate
Bow'd down, and almoſt cruſh'd, thou cam'ſt, tho' late,
Thou cam'ſt upon me, like a ſecond birth,
And made me know what life was truly worth.
Hail, Independence—never may my cot,
Till I forget thee, be by thee forgot;
Thither, O thither, oftentimes repair;
Cotes, whom thou loveſt too, ſhall meet thee there;
All thoughts, but what ariſe from joy, give o'er;
Peace dwells within, and Law ſhall guard the door.
O'erweening bard! Law guard thy door, what Law?
The Law of England—To controul, and awe
Thoſe ſaucy hopes, to ſtrike that ſpirit dumb,
Behold, in ſtate, Adminiſtration come.

He adds with a noble ſpirit—

Why let her come, in all her terrors too;
I dare to ſuffer all ſhe dares to do.
I know her malice well, and know her pride,
I know her ſtrength, but will not change my ſide.
This melting maſs of fleſh ſhe may controul
With iron ribs, ſhe cannot chain my ſoul.
No—to the laſt reſolv'd her worſt to bear,
I'm ſtill at large, and Independent there.

This leads our Author to ſome ſtrokes of perſonal ſatire, but in which —— —— —— [daſhes] ſupply the place of names, with ſcarce an initial letter to direct our gueſs;—a caution, which our Author thought not altogether unneceſſary, even after the above ſpirited declaration.—Our Author concludes his poem with an apoſtrophe to his Country——

O my poor Country . . . . . .
With unavailing grief thy wrongs I ſee,
And, for myſelf not feeling, feel for thee.
I grieve, but can't deſpair—for, lo, at hand
Freedom preſents a choice, but faithful band
Of loyal Patriots, men who greatly dare
In ſuch a noble cauſe, men fit to bear
The weight of empires; Fortune, Rank, and Senſe,
Virtue and Knowledge, leagu'd with Eloquence,
March in their ranks; Freedom from file to file
Darts her delighted eye, and with a ſmile
Approves her honeſt ſons, whilſt down her cheek,
As 'twere by ſtealth (her heart too full to ſpeak)
One tear in ſilence creeps, one honeſt tear,
And ſeems to ſay, why is not Granby here.

He

He then addreſſes the *Minority*—

O ye brave *few*, in whom we ſtill may find
A love of virtue, freedom, and mankind,
Go forth—the champions of your native land,
And may the battle proſper in your hand—
It may, it muſt—Ye cannot be withſtood—
Be your hearts honeſt, as your cauſe is good.

2. Churchill diſſected. A Poem. 1s. 6d. *Nicoll.*

3. An Elegy written in a Quaker's burying Ground. 1s. *Keith.*

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7. The Hiſtory of Miſs Jenny Salisbury, tranſlated from the French of Madam Riccobini, 2 vol. 12mo. 5s. ſewed. *Becket.*

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12. An Eſſay concerning the Human Rational Soul. 3s. 6d. ſew'd. *Fletcher.*

13. The Anti-Times. Addreſſed to Mr. C. 1s. 6d. *Hooper.*

A CHRONOLOGICAL MEMOIR *of* Occurrences,

For OCTOBER, 1764.

FOREIGN AFFAIRS.

RUSSIA.

THE court of Peterſburgh have publiſhed a manifeſto, which gives an account of the tragical end of prince Ivan, who was lately aſſaſſinated in the fortreſs of Schluſſelburgh. It appears from this, that an officer of the regiment of Smolenſk took it into his head to advance his fortune by raiſing prince Ivan to the throne, and therefore endeavoured with the aſſiſtance of the troops of which he was commandant, to ſeize the perſon of prince Ivan; and the officers who were appointed to guard the unfortunate prince having been attacked by the forementioned officer and his troops, thought proper to put the prince to death, in order to preſerve the public tranquility.

Peterſburgh, Auguſt 21. The empreſs is perfectly recovered of her late indiſpoſition. *Lond. Gaz.*

Peterſburg, September 21. M. Mirowitz's trial was concluded yeſterday. He was condemned to be broke upon the wheel; but was told, that her imperial majeſty's mercy would be ſo far extended to him, as to mitigate his puniſhment into the leſs ſevere death of being beheaded: he is to be executed on Wedneſday next. *Lond. Gaz.*

Peterſburgh, Sept. 28. M. Mirowitz, in purſuance of his ſentence, was publicly beheaded on Wedneſday laſt: he behaved at his execution, as he had done throughout the whole tranſaction, with the greateſt reſignation. Six of the ſoldiers and under officers, who were engaged with him, run the gantelop the ſame day: they were ſo ſeverely whipped, that, it is ſaid, three of them are ſince dead. Many more are to be puniſhed. One Uſkakow, a Lieutenant in the regiment of Welikolutz, who was privy to the deſign, was accidentally drowned in his way from Smolenſko. *Lond. Gaz.*

They write from Petersburgh, that the Sieur Lomonozow, of the Academy of Sciences of that city, hath formed the project of attempting again a paſſage thro' the frozen Sea to North America; and that two frigates deſtined for that enterprize are to winter at Kola, from whence they will ſail next ſpring, towards the pole.

DENMARK. Letters from Copenhagen of the 21ſt paſt adviſe, that upwards of 1400 perſons were daily employed in the Daniſh royal woollen manufactory. They produced laſt year 66 pieces of good cloth; and

and in other woollen fabricks there are, in the whole, about 4000 men at work. There are likewiſe 16 ſilk fabricks, where 938 perſons are at work; of the ſaid 16 the royal is the largeſt, there being 105 looms, which employ 335 people.

NETHERLANDS. *Oſtend, October* 4. Laſtnight the tide roſe ſo high that it overflowed the quay, and came up as far as the Cuſtom-houſe; a thing ſcarcely known within the memory of man; not one of the piles, which were driven to defend the banks, was to be ſeen; and this night it is again as high, which fills us with aſtoniſhment to account for it. The wind was varying from one point to another, between N, and N. E. blowing directly into the harbour's mouth. There are ſeveral ſhips which lie here wind-bound, and have done ſo for above a fortnight.

They write from Holland, that the harbours of Fluſhing and Helveotſluice have been conſiderably damaged by the late high tides.

A letter from Amſterdam mentions, that 2000 tons of cordage or now ſhipping at that port for the uſe of the French navy.

POLAND. *Warſaw, Sept.* 8. The ceremony of the election of Count Staniſlaus to the throne of Poland, paſſed the 6th inſt. with the moſt perfect unanimity of the ſuffrages of the whole nation, delivered by the different palatinates aſſembled for that purpoſe; and yeſterday he was proclaimed by the name of Staniſlaus-Auguſtus, and conducted to the court and palace through the acclamations of ſeveral thouſand of ſpectators. The primate announced the election to all the foreign miniſters, who in conſequence thereof demanded audiences this morning; and they accordingly had the honour to pay their reſpects and congratulations on his happy acceſſion to the crown. The coronation is fixed for the 25th of November. *Lond. Gaz.*

The new elected Poliſh monarch is a ſon of Count Poniatowſki, who was a colonel of the Swediſh guards of king Staniſlaus of Poland, and a nobleman of uncommon merit. His attachment to the Perſon of Charles the XIIth of Sweden was ſuch, that he followed him into Ukrania as a volunteer, without any poſt in his army. He was a man of invincible courage, and of great calmneſs and preſence of mind in the moſt imminent dengers. He was the chief inſtrument in ſaving and carrying off the Swediſh hero from the battle of Pultowa, when deſperately wounded; for which ſervice he was promoted to the rank of a general. He alſo preſerved the life of that prince a ſecond time, at the battle of Rugen in Pomerania. He afterwards acted as Ambaſſador from Charles XII. at Conſtantinople; which duty he diſcharged with extraordinary addreſs. His ſon, the preſent king of Poland, who inherits all the virtues of his illuſtrious father, is about five feet ſeven in ſtature, about 32 years of age, has a majeſtic aſpect, a piercing eye, and poſſeſſes great courage, tempered with reaſon; his natural parts, which are ſtrong and quick, are improved by a very liberal education; he is bleſt with the gift of memory in a very extraordinary manner; he ſpeaks ſeveral languages in great perfection, and is a lover of the arts and ſciences. This monarch viſited London in the year 1754, remained in England from the beginning of September to the latter end of December, and when in town, lodged at Mr. Cropenhole's in Suffolk-ſtreet, near the Mews. During his ſtay in this kingdom he made a tour thro' South Britain, and examined every thing worthy the attention of an ingenious and curious traveller. He went two or three times to Weſtminſter Abbey, and copied the moſt remarkable inſcriptions on the ancient monuments there; he was alſo in the golden gallery at the top of St. Paul's church, where he wrote his name. He liked England, and was fond of the perſons in genteel life with whom he converſed; but conſidered the lower claſs in a very unfavourable light, on account of ſome mobs which he chanced to be a ſpectator of, and from thence had too haſtily formed his opinion of the behaviour of the whole body of the common people.

Warſaw, Sept. 18. His Majeſty dined laſt week ſome days with the prince primate, others with the Princes Czartoriſky. There was a drawing-room at the royal palace on Wedneſday and Saturday, and all the grandees appeared there in ſplendid habits. His Majeſty has returned the viſits of the Ambaſſadors who are here. He has alſo paid one to the Prince de Repnin, Miniſter Plenipotentiary from Ruſſia, who gave, the day before yeſterday, in his hotel, the moſt ſuperb feaſt we have ſeen a long time. Both the inſide and outſide of the hotel were magnificently illuminated, having lamps in front, repreſenting the name of his Majeſty, and the words, "Elected on the 7th of September, 1764." After a ball of ſome hours, an opera was performed analogous to the occaſion. They ſupped afterwards at four tables, which were ſplendidly ſerved; and when ſupper was ended, the ball began anew, and laſted till break of day. His Majeſty, who honoured with his preſence this brilliant feaſt, did not return to his palace till it was entirely over.

Warſaw,

Warſaw, Sept. 22. As ſome of the Magnats perſevere in their oppoſition to the general confederacy, and refuſe to acknowledge the king, and as mild meaſures make no impreſſion on them, Prince Czartorinſky, the grand regimentary, has ordered two regiments of horſe, and ten companies of foot, to go and live at diſcretion in the biſhoprick of Cracovia. On the 19th inſt. his Majeſty reviewed the regiment of artillery of the crown, which is encamped in the neighbourhood of Warſaw. From thence he went to viſit the camp of the Ruſſian troops, and returned to dine with Prince Czartoſinſki, Waywode of Poliſh Ruſſia.

Warſaw, Sept. 22. Great preparations are making for the coronation, which will be very magnificent. *Lond. Gaz.*

They write from Warſaw, that a terrible fire broke out there in the Cracow ſuburbs, in the night between the 11th and 12th ult. which had reduced upwards of 40 dwelling-houſes to aſhes.

The laſt letters from Poland aſſert, that the Count Branicki, Caſtelan of Cracow, Prince Lubomirſki, Palatine of Lublin, and Count Oſſolinſki, Palatine of Wolhinia, delivered acts of receſs, ſubſcribed by them, into the ſupreme court of juſticiary in that capital, on the 29th ult. by which the ſaid noblemen acknowledge the new-elected king their lawful ſovereign.

The King of Pruſſia and the Empreſs of Ruſſia have preſented memorials to the King of Poland, in favour of the Proteſtants of that Republic.

GERMANY. *Wittemberg in Saxony, Sept.* 5. There has been a fire at Bruck, near Belzig, which has deſtroyed the church, the cloſters, the deanery, the ſchool, and 77 other publick and private buildings. Near all the production of the harveſt, which was juſt lodged in the barns and granaries, was conſumed; and what ſtill adds to the calamity, the contagion amongſt the horned cattle has raged with ſuch violence, that of 400 head of oxen, which the inhabitants poſſeſſed at the beginning of the year, they have ſcarcely fourſcore left.

Private letters from Auſtria dated the 5th ult. explain the motives for the Turks being in motion on the frontiers of Hungary; which is, that they are only in conformity to a reſolution of the Ottoman porte, declared laſt ſummer, ſending troops to Oczakow, Bender, and Choczim, to change the garriſons, and to repair the fortifications of thoſe places, without any deſign to break the peace, and good underſtanding which ſubſiſt between the Turkiſh empire and its neighbours.

Hamburgh, Oct. 2. Their royal and moſt ſerene highneſſes the hereditary Prince and Princeſs of Heſſe, together with Prince Frederick, arrived at Altena late on Friday evening, in perfect health. Mr. Henning, a Knight of the order of Dannebrogue, and Preſident of Altena, received their royal and ſerene highneſſes at a little diſtance from that city, the ſtreets whereof were illuminated upon their entering into it. The next day the ſenate of Hamburgh deputed two of their members to compliment the hereditary Prince and Princeſs upon their arrival in the neighbourhood of their city, and ſent them a preſent of wine and other refreſhments. The Daniſh envoy having notified their arrival to the foreign Miniſters, they all had the honour to pay their court to their royal and ſerene highneſſes the next day, as did moſt of the nobility here, and were moſt graciouſly received. On Saturday their highneſſes reſted themſelves; and yeſterday morning, about ten o'clock, they proceeded on their journey: in paſſing thro' this city they were ſaluted, both at the entrance and going out, with 21 pieces of cannon. Their royal and ſerene highneſſes were to lay laſt night at the Hope, on the other ſide of the Elbe; and will purſue their journey, in ſhort ſtages, paſſing thro' Zelle and Hanover, in their way to Hanau. It was not till yeſterday morning that the ladies ſent from Hanau had the honour to ſerve her royal highneſs, the Daniſh ladies having continued till then in their employments about her royal highneſs's perſon. Theſe laſt are returned hither to day, having attended upon her royal highneſs as far as the Zollenſpicker (the paſſage of the elbe) where they finally took leave. *Lond. Gaz.*

Clewes, Oct. 13. On the 9th inſt. there fell in many parts of this dutchy, and particularly here, a kind of rain of a red colour reſembling blood, which occaſions various ſpeculations. Mr. Bauman, the Counſellor of war, has ſent a bottle of it to Dr. Schutte, in order for him to examine it, to know whether it contains any thing pernicious to the health of mankind or of beaſts. The day that this phænomenon was obſerved here, and ſeveral preceding days, it rained without ceaſing in this dutchy. It is aſſured, that ſomething of the like kind was obſerved the ſame day at Rhenen in the Province of Utrecht.

A diſtemper has lately prevailed among the dogs, but they are ſoon cured by giving them train oil.

FRANCE. A French ſloop bound from Honfleur to Guadaloupe, with a cargo of 500 barrels of meal, 200 barrels of ſalt beef,

and 50 barrels of butter, and 80 bales of linen of different kinds, is taken by the Corſairs of Morocco, and carried into Santa Cruz in Barbary.

Paris, Sept. 14. They write from Liſbon, that Capt. John Forbes, ſo well known on account of his having challenged Mr. Wilkes, is created colonel of a regiment of foot in the ſervice of Portugal.

Rouen, Sept. 16. In the beginning of this month the parliament confirmed the ſentence which condemned to be broke alive on the wheel, and then caſt into the fire, a young gentleman of Picardy aged 17 years, convicted of having attempted to poiſon at a repaſt, his uncle and aunt, and ſeveral gueſts that were preſent, one of whom died in five hours after. This wretch was executed the 6th; his name was *Roi de Valine*, of a family of note. He already enjoyed his fortune, which amounted to 24,000 livres per ann. The arret grants 10,000 livres of damages and coſts to the family of him that was poiſoned. At his execution he confeſſed all the crimes he was accuſed of, and moreover many robberies and burglaries, which were not ſet down in the indictment againſt him.

SPAIN. The king of Spain has reſolved to eſtabliſh a foundery for printing types, under the direction of one Eudalde Paradell, from whoſe capacity they expect to carry this eſtabliſhment to as high a degree of perfection as in any other country. His Catholic Majeſty grants the ſaid Paradell an annual penſion of an hundred piſtoles, with ſeveral prerogatives, in conſideration of which he engages to bring up apprentices, and to learn them his art.

Letters from Madrid ſay, that his Catholic Majeſty has given orders for three 70 gun ſhips to be put upon the ſtocks at Ferrol, and two of 60 at Carthagena; to be built with the utmoſt expedition.

Cadiz, Sept. 4. The grand fleet bound for New Spain ſailed this morning. It conſiſts of three men of war and two frigates, beſides a French and two Spaniſh barks with ſtores on board; and the troops embarked on board this fleet amount to 2500 men, excluſive of 130 officers. The Sieur de Villalva has the command in chief of it.

PORTUGAL. *Liſbon, Sept.* 19. The reigning Count de Schaumbourg Lippe has taken leave of the court, and will embark to-morrow morning on board the Expedition Packet, with the officers of his ſuite. The preſents his royal highneſs has received are, ſix ſmall pieces of cannon of maſſive gold, of very curious workmanſhip, with his highneſs's coat of arms upon each, upon carriages of Brazil-wood, bound with ſilver-plate, and the wheels of ſilver; a diamond ſtar for his order of the black eagle; his moſt faithful majeſty's picture ſet in diamonds; and a ſet of diamond buckles. *Lond. Gaz.*

They write from Liſbon, that his moſt faithful majeſty is going to eſtabliſh a manufactory of hats in that city, and that a number of Engliſh journeymen hatters are already arrived to be employed there.

ITALY. *Naples, Sept.* 4. The ſickneſs, which for ſeveral months has reigned in this city, and carried off many of its inhabitants, is now entirely ceaſed. The government has ordered three conſecutive days of public thankſgiving, to be obſerved in all the churches, for the ceſſation of the ſaid calamity. *Lond. Gaz.*

Genoa, Oct. 6. Advice is received, that the male contents in Corſica continued the ſiege of San Fiorenza, and had erected two new batteries to puſh it with greater vigour. Two days ago the republic ſent an armed bark, with 60 ſoldiers, and two other barks laden with flour, and other proviſions, to relieve the garriſon, and bring hither the ſick and wounded; they are to touch at Baſtia, to bring back part of that garriſon; and the republic has hired ſome other veſſels to go to Corſica, to bring hither all the Genoeſe troops, as ſoon as the French are put in poſſeſſion of the places, which they are to garriſon in that iſland. *Lond. Gaz.*

Letters from Rome ſay, that they have removed to the Clementinian college there, ſome antiquities which were diſcovered in a vineyard near the church de St. Ceſair, ſituated on the Appian Way, not far from the ruins of the baths of the emperor Caracalla. The workmen who laboured in the vineyard ſtruck againſt a thick vault, which they broke through with great difficulty. In this vault they found four urns of white marble, adorned with baſs reliefs, the ſubject of which left no room to doubt their being ſepulchral urns. Under this vault they perceived another, which being broke through, diſcovered two magnificent oval baſons, the one of a black colour, mixed with veins of the Lapis Calcedonius; its greateſt diameter was about ſix feet and a half, the leaſt three feet, and two feet deep. This baſon contained a human body. The ſecond baſon was of a greeniſh colour, of the ſame dimenſions with the other, except its being but a foot and a half deep. This was covered with white marble, and contained the body of a woman very richly cloathed; but it was hardly opened, before the body and its attire fell wholly into pow-

der;

der; from which was recovered eight ounces of pure gold. In the ſame place was found a ſmall ſtatue of Pallas, in white marble; the work of which is highly eſteemed.

We learn from Rome, that his holineſs intends to erect and endow a new college for promoting the fine arts, in which there will be profeſſors of anatomy, ſtatuary, ſculpture, painting, graving, and architecture; and where a large number of pupils will be commodiouſly lodged and boarded at a very ſmall expence. This new eſtabliſhment is to bear the title of the Roman School.

TURKEY. *Conſtantinople, Sept.* 1. The day before yeſterday, about ſix in the evening, a fire broke out in the quarter of Jubali, and, notwithſtanding there was ſpeedy aſſiſtance, continued burning all the night, and reduced to aſhes forty houſes, beſides a great number of ſhops and warehouſes.

Iſmael, Pacha of Belgrade in Albania, having forcibly entered the city of Vallona, the inhabitants roſe upon him at a time when he was lulled in ſecurity, and maſſacred him, together with a great number of his attendants.

We have advice from Moldavia, that prince Radzivil and his ſpouſe are ſet out for Hungary, with a retinue of an hundred horſemen.

Some Ruſſian troops commanded by the Knes d'Aſkow, having entered Iwanietz, which is only ſeperated from Rotzym by the Nieſter, afterwards approached Kaminietz, which they ſummoned to ſubmit to the authority of the grand regimentary; and upon the refuſal of the commandant, they inveſted that fortreſs; but were fired upon ſo briſkly, that they were ſoon obliged to retreat, with the loſs of ſeveral men.

AMERICA.

Boſton (New England), July 30.

WE hear from Rocky-hill in Connecticut, that a negro fellow belonging to Mr. Brandykee, having been offended, took a knife, with a flint, and ran up to the garret, where was half a barrel of powder open, and ſtruck fire therein, which blew the negro and the roof of the houſe into the air, and tore him to pieces. A man in the houſe ſaw him ſtrike fire once, which did not catch, and ſaved himſelf by running down ſtairs juſt before the exploſion.

A brigantine of 110 tons, named the Royal Charlotte, was launched at Quebec the 4th of Auguſt laſt, being the firſt Engliſh veſſel built in that province ſince its acceſſion to the crown of Great-Britain: Two others of a larger burden are in great forwardneſs.

A foundery for cannon-balls is now ſucceſsfully carried on at Quebec, which finds great vent to the French and Spaniſh iſlands.

From the Quebec Gazette we learn, that matters are entirely ſettled with all the nations who attended the meeting held lately at Niagara; the greateſt ever known, being about 2000 indians. There were twenty-two different nations at this congreſs, eleven of which were weſtern indians; all behaved well, and were diſcharged in the beſt humour.

By letters from South Carolina, it appears, that two ſchemes, of a very extenſive nature, are now carrying on, viz. a ropery, and a ſail-cloth manufacture. The firſt is conſiderably advanced, ſo as to furniſh coaſters with proper cordage; and the laſt will be attended with very ſingular advantage, to the trade of that province.

Letters by the Jane, capt. Hoar, arrived in the Downs from the bay of Honduras bring advice, that every thing was reinſtated on its former footing, relative to the Engliſh Logwood cutters in that bay, purſuant to the treaty of peace, all differences being compromiſed by ſpecial orders from the king of Spain.

EAST INDIES.

BY his majeſty's ſhip Liverpool, which is arrived at Plymouth from the Eaſt Indies, there is an Account, that the Winchelſea Indiaman, the Hon. Capt. Howe, commander, was loſt between Bengal and Bombay on her homeward-bound paſſage. The Winchelſea ſtruck upon the ſands in Bengal river, at 4 o'clock in the afternoon, which gave the captain and crew an opportunity of ſaving their lives, and ſome of the cargo, but very little, as the wind blew exceſſive hard, and the ſea was rough, which

would not admit of the boats going off to her aſſiſtance: There was not a bit of her to be ſeen at five next morning.

The Pigott, from Bengal, brings an account of the death of major Adams, of a diſorder in his bowels; and alſo of the deaths of the colonels Knox and Irwin.

Extract of a private letter (brought by the Pigot indiaman) from the camp of Doudnagur in Bengal, dated March 5, 1764.

"Notwithſtanding the great ſucceſs we met with in our late campaign, our affairs here are far from wearing a peaceful aſpect. Coſſim Ali Cawn, late Nabob of Bengal, has purchaſed, at an immenſe price, the alliance of Sujah Doulah, a very powerful neighbouring Subah; yet, I think it is to be queſtioned, if in conjunction they dare diſpute the ſuperiority of our victorious arms. But cunning and treachery are the characteriſticks of moſt orientals; and thoſe perhaps may prove the ſource of freſh troubles to us."

IRELAND.

Dublin, Sept. 18.

ON Thurſday a common council was held at the Tholſel on occaſion of the terrible riots which have been wantonly raiſed, and wickedly fomented within this city and the liberties adjacent, when it was unanimouſly ordered, that the Lord Mayor be enabled to give a certain reward for the apprehending and convicting every perſon concerned in theſe abominable riots, for which a proclamation is to be ſpeedily iſſued: and a committee of Aldermen and commons is appointed to enquire into the cauſe of theſe riots, and to conſider of the beſt expedients for preventing ſuch ſhameful abuſes for the future.

Dublin, October 2. By yeſterday's letter from Kilkenny we are informed, that a few of the army having taken ſome riotous White Boys priſoners, a number of them endeavoured to reſcue and ſet them at liberty, by attacking the military with arms, &c. when the army defended themſelves, and repulſed the enemy, retook the priſoners and many of the White-boys, but not without killing and wounding ſome dragoons, upon which they fired, ſhot ſome of the rioters dead, and took others into cuſtody, and the reſt fled.

COUNTRY.

THE following is written on the window of an inn at Falmouth. "I have ſeen the ſpecious, vain Frenchman; the trucking, ſcrub Dutchman; the tame, loſt Dane; the ſturdy, ſelf-righted Sweed; the barbarous Ruſs; the turbulent Pole; the honeſt, dull German; the pay-fighting Swiſs; the ſubtil ſplendid Italian; the fallacious Turk; the ever-warring, lounging Malteſe; the piratical Moor; the proud, cruel Spaniard; the bigotted, baſe Portugueſe; all their countries: and hail again Old England! my native land.——— Reader, whether Engliſhman, Scotchman, or Iriſhman, rejoice in the freedom, that is the felicity of thy own country, and maintain it ſacred to poſterity."

A melancholy accident happened on the 17th of Sept. at Braynton-Ford, in Herefordſhire, where a man and a boy, with five horſes in a waggon, endeavouring to paſs the River Wye, were carried down by the rapidity of the current, and all periſhed.

Thurſday 27th ult. two moſt cruel murders were committed in the houſe of Mr. Ruſcombe, in the College-green, Briſtol, upon the bodies of his wife and ſervant woman. Mr. Ruſcombe being at a place near Bridgewater, a female acquaintance ſpent the evening with his wife on Wedneſday, and engaged to dine there the next day; ſhe accordingly went; upon knocking at the door, and receiving no anſwer, lifted up the latch and went in, when, to her great ſurpriſe, ſhe ſaw the ſervant lie bleeding in the parlour, with her throat cut, and ſoon after the miſtreſs, near the bottom of the ſtairs, in the ſame condition: an alarm was given, which ſoon drew together a vaſt concourſe of people, many of whom, on entering the houſe, found the blood was not coagulated: a demonſtration that the horrid deed had been but juſt before carried into execution. Upon examining their bodies, both their ſkulls were found to be fractured. The coroners jury ſat that night upon their bodies, and brought in

in their verdict wilful murder. The mayor and aldermen of that city have offered 100l. reward for a diſcovery.

Bath, September 25. The ſubſcription book for balls for the winter ſeaſon was opened yeſterday, and immediately filled. Mr. Derrick was at the ſame time again appointed maſter of the ceremonies, by the general voice of the company.

Barking in Eſſex, Sept. 30. By the high tide on Thurſday night, a large breach was made in our river between the Thames and the town, twenty-ſix yards in length, by which almoſt all the marſhes between us and Ramham were overflowed. We have not been able to ſtop the breach, the walls being entirely driven away. Two other breaches were made at Ripple-Level in this pariſh; but we have ſince ſtopped them. Many of the marſhes in Rochford Hundred have alſo been overflowed, and great breaches made in ſeveral of the ſea walls. Mrs. Bedlow, who keeps the Ferry at Hull-bridge, has loſt upwards of 40 ſheep. Potten-Iſland and Marſh-bridge (the ſea-walls of which are entirely driven away) were overflowed. At North Fambridge, in Dengey Hundred, a breach was made, by which Mr. Threadgold of that place ſuffered much. A great breach was made near Fobbing, in Barnſtable Hundred; and on the whole, this was the higheſt tide that has been known ſince the year 1736, when all the iſlands in the Hundreds were under water.

Boſton, Oct. 1. Thurſday night laſt there was the higheſt tide here ever known in the memory of the oldeſt man living, occaſioned by the wind blowing hard at N. N. E. Several breaches were made in the ſea banks, whereby the lands were overflowed ſeveral miles round, and the damage ſuſtained thereby is very conſiderable.

Exeter, Oct. 15. Mr. Serjeant Glynn was this day in chamber unanimouſly elected recorder of this city, in the room of Mr. Colwich, our late worthy recorder, who on account of his great age reſigned that office; and at the ſame time the freedom of this city was ordered to be preſented to him; and an expreſs was immediately diſpatched to the ſerjeant to acquaint him therewith.

Newmarket, Oct. 18. His royal highneſs the duke of Cumberland is ſtill here, and will now ſtay till the ſecond meeting, which begins on Monday next. His highneſs is greatly recovered, and takes the air frequently. An inciſion was made in his leg, juſt under the knee, and a ſurpriſing quantity of matter diſcharged, but the wound is now in a good ſtate of digeſtion. He has been bled ſeveral times; his ſurgeons are ſergeant Ranby and Mr. Andrews.

Oxford, Oct. 19. Mr. Elie de Beaumont, counſellor before the parliament at Paris; and ſo well know for his generous defence of the family of Calas, having been ſome weeks in England, arrived here a few days ago, in order to viſit our univerſity, and was on Monday laſt honoured with the degree of doctor in laws.

Briſtol, Oct. 20. Laſt week a fellow was committed to Dorcheſter goal, for the murder of a young man at Maiden-Newton in Dorſetſhire. It appears that after robbing the houſe and murdering the young man, he buried the body under a faggot-pile. After this, being very bloody, he went into a poole not far from the houſe, with all his cloaths on, in order to waſh himſelf; and on his being ſeen there by a boy, he was apprehended on ſuſpicion, as no other perſon was ſeen near the houſe about that time. He confeſſed the fact ſoon after his commitment. He was formerly a ſoldier, and lived in that neighbourhood.

Glouceſter, Oct. 22. We hear the corporation of this city have appointed the hon. Charles Yorke, Eſq; the late attorney general, our recorder, in the room of his late father, the earl of Hardwick.

Saliſbury, Oct. 22. On Wedneſday laſt as the miller at Boram mills near Warminſter, was cleaning the cogs of the wheels, he fell in, and in an inſtant was cruſhed to death.

They write from Hawhurſt in Kent, that the principal ſmugglers there, and at Goodhurſt, the ſeven ſiſters, and at Benuire in Suffolk, have left their dwellings and gone off, their credit being entirely ruined, by not being able to make good their payments to their agents and dealers in France and holland, who refuſe to give them credit even for a trifling ſum, occaſioned by the frequent captures made by the cutters in his majeſty's ſervice on the ſmuggling veſſels.

L O N D O N.

St. James's, Sept. 28.

LAST night one of his majeſty's meſſengers arrived from Madrid with diſpatches from his Majeſty's ambaſſador at that court, tranſmitting a duplicate of the orders, which, in conſequence of his excellency's

lency's late remonſtrances, that court has diſpatched to Don Felipe Ramirez de Eſtenoz, governor of Jucatan; in which orders his Catholick Majeſty diſapproves the proceedings of the ſaid governor, with reſpect to his majeſty's ſubjects in the Bay of Honduras; expreſſes his deſire of giving his majeſty the greateſt proofs of his friendſhip, and of preſerving peace with the Britiſh nation; and commands the ſaid governor to re-eſtabliſh the Britiſh logwood cutters in the ſeveral places from which he had obliged them to retire, and to let them know, that they may return to their occupation of cutting logwood, without being diſquieted or diſturbed under any pretence whatſoever. *Gaz.*

October 1. On Thurſday laſt was held a general court of the governor, &c. of the Bank of England, when a dividend of 2 1-half per cent. (inſtead of 2 1 qr. as for ſome years paſt) was declared for the half year ending the 10th of next month, with aſſurances from the governor, that there were great hopes the ſame dividend would be continued: upon which Bank ſtock roſe that day near 8 per cent.

Friday morning the tide ran higher than has been known for ſome years, and it did conſiderable damage by overflowing the North Shore all the way up.

Saturday Sir William Stephenſon, Knt. was elected lord mayor of this city for the year enſuing.

Saturday afternoon a loaded corn-lighter ſunk in going through one of the arches of London-bridge, by which four men who were therein were unfortunately drowned.

Admiralty-office, Oct. 2. By letters lately received from commodore Paliſſer, dated at St. John's in Newfoundland the 1ſt of laſt month, it appears, that having diſpatched a ſloop with a letter to the French governor at St. Pierre, to enquire into the truth of the reports which prevailed of the French having mounted cannon, and erected works on that iſland contrary to treaty, he, in anſwer, received aſſurances from the ſaid governor, that there was only one four pounder gun mounted without a platform, and with no other intention than to anſwer ſignals to their fiſhermen in foggy weather; that there were no buildings erected or works contrary to treaty; and that the guard conſiſted of no more than forty ſeven men, and had never exceeded fifty. It farther appears by the commodore's ſaid letters, that there had not been, or were at that time, at the iſland of St. Pierre and Miquelon, more than one French ſhip of war of 50 guns, one frigate of 26 guns, and another of leſs force, with two large ſhips en flute, the deſtination of one of the ſaid ſhips en flute being for Cayenne, and the other for St. Domingo; that none of thoſe ſhips had, and, the commanding officer aſſured the commodore, none of them would, enter into any of the Harbours on the coaſts of Newfoundland. And the commodore adds, that the concurring fiſhery in thoſe parts of the ſaid coaſts, whereon the French are by treaties permitted to fiſh, had been carried on in perfect tranquility. *Gaz.*

The king of Pruſſia (ſays an authentick private letter from Warſaw) has written a complimentary letter to the new monarch with his own hand; in which (for his majeſty has ſhewn it to ſeveral of the foreign miniſters) is this remarkable expreſſion: 'Your majeſty muſt reflect that as you enjoy a crown by election, and not by deſcent, the world will be more obſervant of your majeſty's actions than any other potentate in Europe, and it is but reaſonable. The latter being the mere effect of conſanguinity, no more is looked for (tho' much more is to be wiſhed) from him, than what men are endowed with in common, but from a man exalted by the voice of his equals from a ſubject to a king, from a man voluntarily elected to reign over thoſe by whom he was choſen, every thing is expected that can poſſibly deſerve and adorn a crown. Gratitude to his people is the firſt great duty of ſuch a monarch, for to them alone (under providence) he is indebted that he is one. A king who is ſo by birth, if he acts derogatory to his ſtation, is a ſatire only on himſelf; but an elected one, who behaves inconſiſtent with his dignity, reflects diſhonour alſo on his ſubjects. Your majeſty, I am ſure, will pardon this warmth. It is the effuſion of the ſincereſt regard. The amiable part of the picture, is not ſo much a leſſon of what you ought to be, as a prophecy of what your majeſty will be.'

4. Yeſterday the count de Guerchy ambaſſador from France and his retinue, landed at Dover from Calais.

About five o'clock yeſterday morning a fire broke out in Duck-lane, Berwick-ſtreet, Soho, which conſumed ſome work ſheds, and three old houſes, occupied by poor people: it was occaſioned by ſome wet coming to a quantity of unſlacked lime, placed under one of the ſheds the night before. Mr. Lambe, Veſtry-clerk of St. James's was killed by the falling down of one of the corners of the houſes. Several other people received hurts, but particularly Mr. Davis,

turn-

turn-cock, who was ſo much bruiſed that his life is deſpaired of.

A gentleman of a noble family, a priſoner in the rules of King's Bench, has got a moſt remarkable coffin by him, againſt his interment: it was made out of a fine ſolid oak, which grew on his eſtate in Kent, and hollowed out with a chiſſel: it is eight feet in length, about four feet in breadth, four inches thick on the ſides, and ſeven inches and an half at the ends; the lid is three inches thick, made out of the ſame oak: when the corpſe comes to be put in, it is to be faſtened down with oaken pegs. The ſaid gentleman often lies down and ſleeps in his coffin with the greateſt compoſure and ſerenity.

12. Yeſterday the Count La Lippe, commander in chief of his Portugueſe Majeſty's forces in the laſt war, arrived in town from that kingdom.

15. The Parliament which ſtands prorogued to Tueſday the 30th inſtant, is further prorogued to Thurſday the 10th of January next, then to ſit for the diſpatch of buſineſs.

17. Laſt Saturday's Gazette contains his Majeſty's order of council relating to the diviſion of ſeizures of ſmuggled goods, made by the officers and men of ſhips and ſloops of war; thoſe made by the officers and men of cutters commanded by lieutenants; and thoſe made by ſhips or ſloops of war, in conjunction with cutters.

B——KR——TS.

Sept. 22. Peter Caroa, of Bell-Alley, Coleman ſtreet, London, jeweller.

25. Philip Handcock, of Rood-lane, merchant. — Thomas Smith, of Rotherhithe in Surry, ſhip-chandler. — Elizabeth Robinſon, of Queen-ſtreet, Soho, Middleſex, Millener. — James Squire, of Cliſton upon Team, Worceſterſhire, dealer. — John Baverſtock of Alreſford, Hants, dealer.

29. Joſeph Hughes, of Walſall, Staffordſhire, rope-maker. — Sampſon Cohen, of Dartmouth, Devon, dealer.

Oct. 2. Peter Cuffley, of Colcheſter, Eſſex, ironmonger, bricklayer, and limeburner. — Joſeph Romberg, of Poor Jury-lane, merchant. — John Aingworth, of Bewdley, Worceſterſhire, innholder and victualler.

6 William Dow, of Spital-fields, linen-draper.

13. Bridges Hervey and Andrew Boſwell, of Wolverhampton, in Staffordſhire, ironmongers, and copartners.

16. Walker Haigh, of Honley, near Huddersfield, Yorkſhire, oilman. — John Groſs, of the pariſh of Wandſworth, Surry, linen-printer. — William Battie, the younger, of Sheffield, Yorkſhire, money-ſcrivener.

20. Richard Peſtell, of Tooley-ſtreet, St. Olave's, Southwark, Carpenter.

BILL *of Mortality from* Sept. 25. *to* Oct. 23.

Buried,			Chriſtened,		
Males — 882	1784		Males — 620	1282	
Females 902			Females 662		
Under 2 years old	644		Buried,		
Between 2 and 5	166		Within the Walls	112	
5 and 10 ——	91		Without ——	465	
10 and 20 ——	63		*Midd.* and *Surry*	905	
20 and 30 ——	171		City & Sub. *Weſt.*	302	
30 and 40 ——	142				1784
40 and 50 ——	150				
50 and 60 ——	136		Weekly, *Oct.* 2.	477	
60 and 70 ——	105		9.	393	
70 and 80 ——	77		16.	466	
80 and 90 ——	37		23.	451	
90 and 100 ——	2				1784
100 and 109 ——	0				
	1784				

N. B. *In Mr.* Simpſon's *Life, Pag.* 487, *Column* 2, *for* Not long after this he was choſen a Member of the Royal Society, *read*, He was admitted Fellow of the Royal Society in 1745, having been propoſed as a Candidate by *Martin Folkes*, Eſq; Preſident, *William Jones*, Eſq; Mr. *George Graham*, and Mr. *John Machin*, Secretary; all very eminent Mathematicians.

Each Day's Price of STOCKS, In September 1764. ☞ Books shut, is signified thus, ——

	BANK Stock.	In. Stock.	South Sea	3½ per Cen Old Ann.	Dit. New Ann.	3 per C.B. A. redu'd	Ditto consol.	Ditto 1726.	Ditto 1756.	3 per C. India An.	3½ B. An. 1756.	Ditto 1758.	India Bon l. s. d.	Wind at Deal.	Weather at Lond.
29	122¼	146	——	82½	——	83¼	83⅛	——	——	——	——	87⅜	2 4 o	N N W	rain
30	Sunday.													W N W	Do
1	122¼	——	——	——	——	——	83	——	——	——	——	——	Do	N N W	fair
2	122	——	——	82⅛	——	——	Do	——	——	——	——	87⅜	2 5 o	W	rain
3	121¼	146½	92	——	81¼	——	82⅞	——	81¼	——	85¼	——	Do	Do	fair
4	122	——	——	——	——	——	83	——	——	——	——	87⅜	Do	W N W	Do
5	——	147	——	——	81¼	——	83¼	——	81¼	——	——	——	2 2 o	S by E	Do
6	——	147⅛	92	——	——	——	83¼	——	——	——	——	87⅛	2 4 o	E N E	Do
7	Sunday.													N E	Do
8	——	149	——	——	81⅞	——	83⅛	——	——	——	——	——	2 3 o	S	Do
9	122¼	——	——	——	——	——	Do	——	——	——	——	87⅛	2 4 o	S W	rain
10	122¼	146½	92	——	81⅞	——	83¼	——	——	——	85¾	——	2 0 o	W S W	fair
11	123¼	——	——	——	——	——	83⅛	81	——	——	——	87⅛	2 2 o	Do	rain
12	123¼	147½	——	81¼	82⅛	82⅛	Do	——	81¼	——	85¼	87⅜	1 19 o	Do	Do
13	——	——	——	——	Do	Do	Do	——	——	80½	——	Do	2 0 o	N E	fair
14	Sunday.													N W	Do
15	——	——	——	——	82⅜	——	Do	81⅛	——	——	85⅛	——	2 1 o	S W	Do
16	——	——	——	——	Do	——	Do	——	——	80⅜	——	87½	2 0 o	S	Do
17	121¾	147½	——	——	82½	82⅛	83½	——	82	——	85¾	——	Do	Do	rain
18	121¼	149	——	——	Do	——	83⅜	81⅛	——	80⅜	——	87⅝	1 18 o	S W	Do
19	——	148⅞	——	——	——	——	Do	——	——	——	——	Do	Do	Do	fair
20	121½	——	——	——	82⅝	82⅞	83½	——	——	80½	——	87¾	Do	S	Do
21	Sunday.													S W	Do
22	——	——	——	——	82¼	82⅛	83⅛	——	——	Do	——	——	1 17 o	W N W	Do
23	——	148	——	——	——	82⅞	83½	——	——	80¼	——	88	Do	N	rain
24	121½	148½	——	——	82⅝	Do	83⅞	——	82½	——	85¼	Do	1 14 o	Do	fair
25	121¼	148¼	——	——	82¾	Do	Do	——	——	80⅝	——	Do	1 18 o	N W	rain
26	121¼	——	——	——	——	——	84⅛	——	——	——	——	88⅛	Do	W N W	fair
27	122½	148⅝	——	——	83¼	——	84⅛	——	——	80⅞	——	——	1 19 o	N	Do
28	Sunday.														Do

London: The Peck Loaf to weigh 17 lb. 6 Oz. by Dr. Wheaton, to be sold for 2s. 2d. ½

The GENERAL MAGAZINE,

For *NOVEMBER*, 1764.

On the LAWS *of* ENGLAND.

To the Compiler of the Law Part of the General Magazine.

The Communication between my Lord Chancellor and Judge* Hales, *being among other Judges to take his Oath in* Weſtminſter-hall, Anno 1553, *the 6th of* October. 1 Mary.

QUEEN MARY *no ſooner found her ſelf ſecure on the throne, but ſhe preſently forgot both her promiſes to maintain the eſtabliſhed religion, and the good ſervices done her in that critical juncture by the* proteſtants, *of which this ſmall piece before us is a ſtragrant proof.*

Judge Hales *was the only one of that Bench,* who refuſed *to ſign that inſtrument, which tranſferred the crown to* Jane Grey, *at the riſque, not only of his eſtate, but of his life alſo. Yet he was immediately called in queſtion, as you read in the following paper; and, as hiſtory further acquaints us, firſt caſt into the* Marſhalſea, *thence removed to the* Compter, *and then to the* Fleet, *for charging the juſtices of* Kent, *to conform to the laws of K.* Edward VI. *concerning religion, not yet repealed, or properly, for being a ſincere* Proteſtant.

The judge, though as it appears in this communication *between him and the chancellor, preferred a good conſcience to his office, the queen's favour, his fortune, and even to his life, was ſo bitterly perſecuted, and, when the warden informed him of the cruelties preparing for thoſe, who would not change their religion, his brains turned ſo, that he endeavoured to kill himſelf with a pen-knife; and, though in this condition, he was ſet at liberty, he never recovered his ſenſes, and at laſt drowned himſelf.* See Burnet, Tom. II. Reform. p. 248.

CHANNCELOR.

Maſter *Hales*, ye ſhall underſtand, that like as the quene's highnes hath hertofore received good opinion of you, eſpeiallie, for that ye ſtoode both fatihfullie and lawfulli in hir cauſe of juſt ſucceſſion, refuſing to ſet your hande to the booke amonge others that were againſt hir grace in that behalf; ſo nowe through your owne lete deſertes, againſt certain hir highnes dooinges, ye ſtande not well in hir graces fauour. And, therefore, before ye take anie othe, it ſhall be neceſſarie for you to make your purgation.

Hales. I praie you, my lord, what is the cauſe?

Channcelor. Information is giuen, that ye have indicted certain priſtes in *Kent*, for ſaiing of maſſe.

Hales. Mi lorde, it is not ſo; I indicted none, but indede certaine indictments of like matter wer brought before me at the laſt aſſizes there holden, and I gave order therin as the lawe required. For I haue profeſſed the lawe, againſt which, in caſes of juſtices, wil I neuer (God willinge) procede, nor in ani wiſe diſſemble, but with the ſame ſhewe forth mi conſcience, and, if it were to do againe, I wolde doe no leſſe then I did.

Channcelor. Yea, maſter *Hales*, your conſcience is knowne wel enough,

* *Stephen Gardiner*, biſhop of *Winchester*, *Dugd. Chron. Ser.* 88.

enough, I knowe ye lacke no conſcience.

Hales. Mi lord, ye mai do wel to ſerch your one conſcience, for mine is better knowne to mie ſelfe, then to you; and to be plaine, I did as well uſe juſtice in your ſaide maſſe caſe bi mi conſcience, as bi the lawe, wherin I am fulli bent to ſtand in trial to the vtmoſt that can be obiected. And, if I haue therin done ani iniuri or wrong, let me be iudged by the lawe, for I will ſeeke no better defence, conſidering chiefli that it is mi profeſſion.

Chauncelor. Whi, maſter *Hales*, although ye had the rigour of the lawe on your ſide, yet ye might have hadde regard to the quene's highnes preſent doinges in that caſe. And further, although ye ſeme to be more then preciſe in the lawe; yet I thinke ye wolde be very loth to yelde to the extremitie of ſuche advantage, as mighte be gathered againſte your proceedinges in the lawe, as ye haue ſome time taken vpon you in place of juſtice. And, if it were well tried, I beleue ye ſhuld not be wel able to ſtand honeſtli therto.

Hales. Mi lord, I am not ſo perfect, but I mai erre for lacke of knowledge; but both in conſcience and ſuch knowledge of the lawe, as God hath giuen me, I will do nothing but I wil maintain and abide in it. And if mi goodes, and all that I haue, be not able to counterpoiſe the caſe, mi bodie ſhal be redi to ſerue the turne, for thei be all at the quene's highnes pleaſure.

Chauncelor. Ah, Sir, ye be veri quicke and ſtoute in your anſwers, but as it ſholde ſeme that which ye did was more of a wil, fauouring the opinion of your religion againſt the ſeruice nowe vſed, then for ani occaſion or zeal of juſtice, ſeinge the quene's highnes dooth ſet it forth, as yet wiſhinge all hir faithful ſubiects to imbrace it accordinglie; and, where ye offer both bodie and goodes in your trial, there is no ſuch matter required at your handes, and yet ye ſhall not haue your owne will neither.

Hales. Mi lord, I ſeek not wilful wil, but to ſhew myſelf, as I am bound in loue to God, and obedience to the quene's maieſtie, in whoſe cauſe willingly for juſtice ſake (all other reſpects ſet apart) I did of late (as your lordſhip knoweth) aduenture as much as I had. And as for my religion, I truſt it to be ſuche as pleaſeth God; wherin I am ready to aduenture as wel mi life, as mi ſubſtance, if I be called therunto, and ſo, in lacke of mine owne power and wil, the Lordes Wil be fulfilled.

Chauncelor. Seeing ye be at this point maſter *Hales*, I wil preſently make an end with you. The quenes highnes ſhall be infourmed of youre opinion and declaration. And, as hir grace ſhal therupon determine, ye ſhal haue knowledge, unto which tyme ye may depart as ye came, without your oth, for, as it appeareth, ye are ſcarce worthi the place appointed.

Hales. I thancke your lordſhip, and as for my vocation, being both a burthen and a charge, more then euer I deſired to take vpon me, whenetier it ſhal pleaſe the quenes highnes to eaſe me therof, I ſhall mooſt humbli with due contentation obei the ſame.

And ſo departed from the barre. 3 *Harl. Miſcel.* 166.

A lawful Correſpondent.

Alteration

Alteration of Government.

MEMORANDUM. That about *Hilary* term 1659, 11 *Car.* 2. the government of this commonwealth (as it was called) was in the surviving members of the long parliament, which consisted of some of the house of commons only who were about this time re-admitted to their trust to this intent only that they should cause a new parliament to be summoned, which they accordingly did in the vacation; and the writs which they issued for choosing knights, citizens, and burgesses, were made out (as other process then was) *In the name of the keepers of the liberty of* England, *by authority of parliament*: and those writs were returnable the 25th of *April*, in the year *1660, at which day they appeared, and sat in the House of Commons, and some of the lords came of their own head to their House of Peers, and in a short time the other lords also came, and both houses of parliament having received letters from our lord the king, *Charles* the *second* (undoubted heir to the crown, and to the virtues of his martyred father *Charles* the *first*) dated at his court at *Breda* in the 12th year of his reign with his declaration inclosed (containing among other things, a general pardon); whereupon commissioners were sent from the lords and commons, and from the very ancient city of *London*, to his sacred majesty, (who then was at *Breda* in *Flanders*) to desire his return to his people, which he accepted, and came to *London*, 29 *May*, in the year of our lord *1660, and in the 12th year of his reign (reckoning it from his father's death) where he was received with all the expressions of imaginable joy.

Memorandum. That about the beginning of *Easter* term, the king went to the parliament, in which two acts were passed, 12 *Char.* 2. chap. 3, one for reviving *this* term which was discontinued, inasmuch as the courts sat only the two last days; and the other for confirming this parliament; but, whether it was thereby made a good parliament, was questioned among the learned; and it was held by many in the negative, there not being any president, that a number of people assembled without the king's writ (as they were) could be called a parliament. And then, (according to the rules of our law) confirming a void king is ineffectual, but it had been otherwise, if they had been summoned by one who was king in fact, (though not by law) and this judgment happened, as it seems, when *Hen.* 6. was expelled by *Edw.* 4. and also in the case of *Rich.* 3. *Sid.* Rep. 1, 2.

See *Ventr.* 15. 12 *Char.* 2. chap. 1.

To the Author of the General Magazine.

SIR,

YOU was pleased to inform us in your last number, viz. for *October*, 1764, of the great opinion the learned *Fleetwood* had of the commentaries of *Plowden*, I beg leave to add that those commentaries are now to be had well translated, and handsomely printed at a very moderate price.

Yours, &c.

Inner-Temple, Mich. Term, 5 *Geo.* 3. A Student.

* See Anecdotes concerning *Kelynge* L. C. J. to King *Charles* the *second*, in Preface to References at the End of L. C. J. *Holt*'s Life, V.

CASE, *With the preſent lord* Mansfield's *(when ſolicitor general) and the late lord chief juſtice* Ryder's *(when attorney general) opinion thereon, in regard to intereſt on a judgment.*

Feb. 1731. A. W. of *Barbadoes* made his will and appointed *J. A.* Eſq; *E. W.* his wife, and *D. W.* his ſon, executors, and ſoon after died.

J. A. alone proved the will and acted in the executorſhip and received in ſeveral debts due to the teſtator's eſtate, which were ſtanding out at intereſt.

E. W. being intitled by the ſaid will of her huſband, to the money ſo received by *J. A.* died and made *Z.* and *X.* her executors, who calling *J. A.* to account for the money he had received as aforeſaid, and he not paying the ſame ſued him in *Barbadoes* and recovered a judgment there againſt him for the whole money due on the balance of his account; but *J. A*'s affairs being then much embarraſſed, though he had a great eſtate, he was not able to pay the money, ſo recovered, but was forced to come to *England*.

Since *J. A*'s coming to *England*, the produce of his eſtate has near cleared his debts, ſo that few are now outſtanding, ſave the ſaid debt on the aforeſaid judgment, which his eſtate is now able to diſcharge.

The ſaid executors of *E. W.* and plantiffs in the ſaid judgment refuſe to accept the money recovered, but inſiſt upon *intereſt* for the ſame, from the obtaining the judgment down to this time.

J. A. inſiſts that as they have recovered judgment, they are intitled to no more than the ſum recovered, and that no *intereſt* can be recovered on the judgment, it being an adverſary judgment, and not confeſſed in debt upon a penalty for any more than the ſum really due.

Q. Can the plantiffs in the ſaid judgment recover intereſt thereon by bill in equity, or are they intitled to any more than the ſum for which the judgment is obtained.

By bringing an action of debt upon the judgment perhaps the plantiffs may recover intereſt by way of damages, but I do not know any other way in which they can come at any allowance of intereſt; at law they can only take out execution for what is recovered, and equity can carry it no farther.

15 *Oct.* 1745. *W. Murray.*

In caſe an action of debt is brought on this judgment, the jury may if they think proper, give intereſt upon it by way of damages, which is ſeldom done but on the particular circumſtances of the caſe as the great length of time ſince the judgment, the delay of execution owing not to the negligence of the creditor, but the conduct of the debtor, the nature of his eſtate: *J. A*'s running away, is one circumſtance of conſiderable weight in favour of intereſt, if by reaſon of that the want of eſtate to be taken in execution, the plaintiff has been kept long out of his money, I think they ought to have intereſt.

7 *Oct.* 1745. *D. Ryder.*

CASE *of*

June, 1737. T. B. Eſq; made his will and thereby gave the following legacy, S. T. *Eſq*;

"Item, *I give to the poor of the pariſh where I die five hundred pounds*," and he deſires that he may be buried if he

he dies within ten miles of *London*, in *Bunhill-fields*.

After the making this will the teſtator left *London*, where he then reſided and went over to *Holland* to make a tour, *but was taken ill upon the road, and died at the Ham in Vine Street, Rotterdam. S. T.* Eſq; his executor and reſiduary legatee, hath proved his will, and Mr. *O——k*, a merchant in *London*, has lately demanded the 500*l.* on behalf of the poor, at *Rotterdam*, as he alledges. *Rotterdam* is not divided into pariſhes, as *England* is, and the *Ham* in *Vineſtreet*, *Rotterdam*, is no pariſh, there the poor are not provided for by pariſhes, but by the magiſtrate, and there is not properly any poor of the pariſh, there being no diſtrict of that appellation, nor any church-wardens or over-ſeers of the poor, as in *England*.

Q. 1. If this legacy be not lapſed or adempt for want of a proper deſignation or capacity in any perſon to take; if not, how and by whom it is recoverable?

I think this is not a lapſed or void legacy, but being a bequeſt to a charitable uſe, if it may not, or cannot take effect exactly according to the words of the will, it ſhall be applied to a charitable purpoſe as near as may be agreeable to the intention of the teſtator; and the proper way for ſettling thereof, would be by information in Chancery, in the name of the attorney general, and I am of opinion that if the teſtator left aſſetts, this 500*l.* muſt be paid by the executor, and muſt be applied to charitable uſes for the benefit of poor perſons. And if it ſhall not be deemed to belong to the poor of *Rotterdam*, it will belong to the king to appoint the charity to which this 500*l.* ſhall be applied.—What I have ſaid above, I think has been fully ſettled, and cannot be now controverted; but whether this 500*l.* is to be paid to *Rotterdam*, and applied for the benefit of the poor there, or whether it ſhall be applied for the benefit of the poor in *England*, is, as I apprehend, a queſtion of great difficulty.—And I cannot find that it has ever been determined, whether a charitable bequeſt by a will made here ſhall, or ſhall not be carried into execution, or decreed by a court in *England* for the benefit of a foreign country, and it is to me doubtful whether this bequeſt in the teſtator's will was not made upon the ſuppoſition that he ſhould die in *England*, which was the place of his birth and uſual reſidence, and where his eſtate lay.—But as this point in reſpect to a foreign country, has not been yet ſettled, I think it too much for the executor to take upon him to pay this 500*l.* to any body, without the direction of the court of Chancery, for if he ſhould pay it to a wrong hand, he may ſubject himſelf to pay it twice over.—And therefore, the beſt way for his indemnification in this caſe, is to get either an information in Chancery exhibited in the name of the attorney general, or elſe a bill in chancery by or in the name of the magiſtrates or perſons of *Rotterdam* [to which bill, the attorney general, as well as the executor, ſhould be made defendants]. And by either of theſe means the matter might be brought into queſtion and ſettled, and the executor be thereby indemnified in paying the money according to the decree of the court.—As to what is ſaid in the preſent caſe that *Rotterdam* has no pariſh, or pariſh officers, I think that will not make any difference, but that *Rotterdam* though it has no pariſh, or diſtrict called by that name, yet has as good a right to this legacy, as

as it would have had, in case it had been a parish; for the testator, to be sure, did not, when he made his will, think of making any difference between a parochial, and an extraparochial place. And I am of opinion, that, in case the testator had died in a parish in a foreign country, such foreign parish would have had no more right to the benefit of this bequest, than *Rotterdam* has now. But the difficulty, in my opinion, in the present case, arises from the testator's having died in a foreign country; and, that too, where he was only making a short tour as a visitor or traveller. And where the court, which must decree the payment of this money, has no jurisdiction, nor can redress, or punish, any misapplication that shall be there made of the money.*

27 *Aug.* 1740. *Robert Bicknell.*

To the Compiler of the Law Part of the General Magazine.

SIR,

THE lord chief justice *Coke*, in his first reading on Fines, (see his Law Tracts, p. 226.) and in his 10th reading (see his Tracts, p. 252, 253,) *seems to think it had in all ages been the law of this realm, that a fine could not be levied without an original writ. Whereas, in* Easter Term, 21 Ed. 4. *In the abbot of* Merton's *case*, Tremayle *said*, "*I think a fine may be levied without an original; a fine is nothing more than a covenant between the parties, and recorded by the justices; and if it be before justices of record, the parties being present, it seems good, for the writ is sued only to the intent to make the parties appear, and if they are present, and will appear gratis, it is not necessary to have a writ; but they may make a final covenant by record of the justices. And a fine is but a covenant of record. Year Book Pasche* anno xxi E. iiii. fol. 4. N°. 8. / Brigges *and* Bryan *seem to be of the same mind, ibid.* Mich 21 E. 4 fol. 60, N°. 32. *ibid.* fol. 62." Mad. *dissert. concerning ancient charters and instruments prefixed to his* Form. Anglican. xvii.

A Vindication of the ancient Jurisdiction of the Court of Common Bench at Westminster, *against a Misrepresentation thereof, in an Answer to the Examination of the Scheme of Church Power laid down in the Codex, &c. by the late Mr.* J. Foster.

To the Author of the Parallel.

Cum subito aliud jus nempe pontificium sive canonicum emersit, insperantibus hominibus, immo invitis et reluctantibus.'

Crag de origine juris, Canon. Tit. 3.

SIR,

IN your answer to the examination of the scheme of church-power laid down in the *Codex Juris Ecclesiastici Anglicani, &c.* You are pleased to assert "*That the bishops had a distinct right of jurisdiction in spiritual matters before some of those courts which now prohibit them, had any existence themselves, distinct from the King's Bench, for the Exchequer was severed from it in the time of William the Conqueror, and the Common Pleas by Magna Charta in the time of Henry the third.*"

My present purpose is to shew that you are mistaken in this assertion, more particularly as to the *Common Pleas*.

There is nothing in *Magna Charta* to found your opinion on but the following clause, "*Communia placita*

* See other opinions on this case in p. 161 of this Mag. for *April*, 1764.

ta non ſequuntur curiam noſtram ſet teneantur in aliquo loco certo." Does this look like the creating a new juriſdiction or giving power where there was none before? If ſo, to whom is the power given? If there were not juſtices of the bench at the time of this ſtatute, when or by what authority were they created? By this ſtatute they were not, for in the next chapter but one it is ordained, that "*Aſſiſe de ultima preſentatione ſemper capiantur coram* Juſticiar. de Banco." Here your aſſertion is refuted by your own evidence by *Magna Charta* itſelf, unleſs you will ſuppoſe that the juſtices of the bench are mentioned in this ſtatute before they had exiſtence.

There is a caſe, in the book of *Aſſiſes*, *Anno* 26 *pl.* 24 *En Aſſiſe de novel diſſeiſm*, wherein it was ſhewn by the abbot of B. that his predeceſſors had conuſance of pleas by uſage in the time of *St. Edmund and St. Edward the kings*, and that king *Henry the firſt* by his charter confirmed all the uſages, and that he ſhould have conuſance of all manner of pleas; ſo that the juſtices of the *one Bench or the other* [*iſſint juſtic. d'un bank. et dau't,*] ſhould not intermeddle. Therefore if there were juſtices of both Benches, temp. *Hen.* 1. thoſe of the one could not receive their exiſtence from *Magna Charta*.

Sir *Ed. Coke* in the preface to his 8th report, ſays, that in Michaelmas term, 6 *Rich.* 1. *A fine was levied between the Abbot of S. and Theobald C. of the advowſon of the church of Preſton, before the juſtices of the Bench.*

In *Stowell's* caſe, Plow. 358 *b.* it is ſaid that in order to avoid a non-claim at common law, after the paſſing of a fine it was uſual to enter in writing at the bottom of the record of the fine. "*Talis venit et apponit clameum ſuum ad terras infra ſcriptas.*" And my lord chief juſtice *Dyer* ſaid that in the times of five kings before *Edw.* 3. he had ſeen ſuch entries made, and Mr. Juſtice *Catlyn* cited many fines of antiquity, ſome before the *Conqueſt*, touching the poſſeſſions of the Abby of *Crowland*; and divers after the conqueſt proving the continuance of fines *from the conqueſt to the time of Ed.* 1. when the ſtatute of fines was paſſed.

That fines were levied before *Magna Charta* appears from *Glanvill*, who died long before that ſtatute was made, for he deſcribes a fine thus, "*Dicitur talis concordia finalis eo quod finem imponit negotio, &c.*"

I do not know that it has been ſo much as ſuppoſed that fines were ever levied in the *King's Bench*, or that *Juſtices de Bank* or *Juſticiarii de Banco* were ever taken for other juſtices than thoſe of the *Common Pleas*. I cannot help therefore concluding from hence, that this court had exiſtence before *Magna Charta*.

But the antiquity of this court appears further from ſome fragments of records and judgments, temp. *Rich.* 1. as well *coram Juſticiariis de Banco* as coram Rege, which Sir *Ed. Coke* in his ſaid preface ſays did in his time remain in the treaſury; and he there mentions another ſtrong proof that *Martin de Pateſhull was made Juſticiarius de Banco*, 1 *Hen.* 3. which was before *Magna Charta*.

Glanvill, who was a judge, and lived in the time of *Hen.* the ſecond, entitles his book, "* *Tractibus de legibus, &c.—ſecundum quas placitabitur in curia regis, ad ſcaccarium*, and *coram Juſticiariis ubicunque fuerint*. This I think proves the diſtinct exiſtence of the *King's Bench*, *Exchequer*, and *Common Pleas* in the time of *Hen.* 2. for as pleas in the *King's Bench* were never *coram Juſticiariis*, but always *coram*

* See *Nicol. Eng. hiſt. Libr.* 224.

coram Rege, thoſe words *coram Juſticiariis ubicunq;* &c. muſt import the court of *Common Pleas*. At this time indeed the juſtices of that court were not confined to any certain place, but writs were returnable before them *ubicunque fuerint* and continued ſo till *Magna Charta*, which confined them to a certain place, ever ſince at *Weſtminſter*. *Glanvill, lib. 2. c. 6.* in deſcribing trials *per Duellum et per magnam aſſiſam*, expreſly mentions this court, his words are "*ſi ſemel conceſſerit petens in curia quod ſe inde in aſſiſam ſe ponet et hoc verbo coram Juſticiis in Banco ſedentibus expreſſerit*, &c.

Laſtly in the 10 *Ed. 4. fo.* 53. All the judges in *England* did affirm that the *Chancery*, *King's Bench*, *Common Place*, and *Exchequer* were all the king's courts, and had ſo been *time out of the memory of man, ſo as no man knew which of them was moſt ancient*.

Theſe particulars prove beyond diſpute how far from truth your aſſertion is, that *the biſhops had a right of juriſdiction before ſome of thoſe courts which now prohibit them had any exiſtence*, for thoſe courts which now prohibit biſhops, had exiſtence for ought we know to the contrary, even before the chriſtian religion was received in *England*.

Yours, &c.

A. Z.

To the Printer of the General Magazine.

A ſtrange Report.

SIR,

THIS has long been a litigated queſtion, *viz.* whether the executor ſhould have the ſurplus, where there is a ſpecific legacy given him? In 1725, *King*, lord chancellor, brought a bill into the houſe of peers (which paſſed that houſe) to ſettle the point; but upon ſending it down to the commons it was thrown out upon the firſt reading; a bill ſent up by the *Commons* to prevent bribery and corruption in elections having been refuſed to paſs in the houſe of lords. The Bill was to have ſettled it for the benefit of the executor. *Stra.* 568, 569.

N. B.

To the Editors *of the* General Magazine.

On the Origin *of* LANGUAGE.

GENTLEMEN,

I have taken the liberty to ſend you ſome remarks on the nature and origin of language; which, if you think they merit the attention of the public, you may inſert in your Magazine.

AS the ſagacious Mr. *Locke* ſeems to be much miſtaken, after all his learned diſquiſitions on this ſubject, in ſuppoſing the origin of human ſpeech to be nothing more than the inventing, framing, and compounding of articulate ſounds, which were to ſtand as arbitrary ſigns of our conceptions, I thought it would have been a fruitleſs talk for me to engage in a metaphyſical inquiry touching the origin of language: but ſtill, though it may be true, that many arbitrary terms have been adopted, it does not, from thence, follow, that the total frame and conſtruction of language was originally nothing more than a

mere

mere human invention of arbitrary ſigns; nor is it eaſier to conceive the origin and progreſſion of human ſpeech to be the effect of chance, conveniency, or neceſſity, as the ancient *Romans* imagined, according to *Horace* and ſome other of the *Roman* poets; and the wild conceit of thoſe who fancied the language of the *Hottentots* to be inarticulate, like the jabbering of apes, have been long ſince fully confuted. But the general opinion of Chriſtians, Mahometans, and the ancient *Greeks* has been, that the origin of ſpeech was from divine inſpiration; tho' they differed ſomewhat in reſpect to its progreſs.

Conceiving therefore the former of theſe opinions as tending greatly to depreciate human nature, and conſequently to promote irreligion, in order to ſupport the later, I have employed myſelf, in finding out ſuch terms as had a real agreement with the nature of things; in the courſe of which inquiry, I hope I have been ſo fortunate as to diſcover the origin and progreſs of language to be agreeable to the progreſs of nature; for, in the firſt place, general characters ſeem to have been formed, primarily and figuratively to repreſent the elements of nature and other general ſubjects; and alſo in a ſecondary ſenſe, as letters or notes of articulate ſounds, the inviſible qualities of the ſeveral objects. Theſe, again, ſeem to have been divided, abſtracted, and diminiſhed by other privative and negative characters and letters. To which, alſo, have been added, radical conſonants, which had a power of being inflected, ſo as to form auxilliary conſonants, or new notes of articulate ſounds; by which, as things multiplied, language might be alſo inlarged.

In conſequence of which diſcovery I proceeded to define the characters, letters, particles, and vocables, agreeable to their natural preciſion; and found that they bore ſuch a meaning invariably thro' a lexicon of four languages, namely, the *Engliſh*, *Celtic*, *Greek*, and *Latin*; which have been ſet in a comparative view; and allowing for the tranſpoſition of particles, theſe four languages, or dialects, almoſt appear from inſpection to be of the ſame *Celtic* original; but in defining them according to the *Celtic* ſenſe of the particles, as they are ſtill moſtly underſtood as words in the *Welſh*, or *Celtic*, they clearly appear to be of one origin. Theſe explications I have alſo ſupported by a topography of the ancient names of *Aſia* and *Europe*, and in a great meaſure by the opinions of former gloſſariſts on the ſeveral languages, grounded on analogy and grammatical ſounds.

I am very ſenſible that any attempt of illuſtrating this matter by a few detached paſſages, muſt detract from the value of a work of this nature; but as inſtances ſeem neceſſary in this caſe, to give ſome idea of the ſenſe of the characters and letters, the following are offered, *viz.* The great *O* ſtands for the univerſe, the little *o* for the ſun, the globe, and other round bodies; the long ſtroke of *i* expreſſes length to the dot over it, which repreſents the ſun; whence *i* ſtands as an hieroglyphical character, or figure, for the element of fire; the *L* is a compound of two *i*'s, ſignifying length and breadth, that is, extenſion, therefore *ol* is the *Celtic* particle for *all*, that is, an *o* extended, or the univerſe; and this ſenſe it bears in compounds, as in the *Celtic* verb *olhai*, to make whole, the ſubſtantive *heil* the ſun, which is a compound of *h-o-il*, the high fiery or lightened *O*, and in the *Engliſh* adjective *cold*, which is a compound of *ac-o-il-id*, ſignifying *it is from the*

fiery O, or the ſun, *id* being the *Celtic* for *it is*, and of the ſame origin as the *Greek* verb *ideo*, to ſee or to ſeem, and the radical active vowel being commonly dropped, though underſtood, in *Celtic* nouns. The *a* and *e* are the *o*, or the globe divided, and ſignify earth and water; the letter *R*, which is a letter of ſound only, being added to the character *a* makes the *Celtic ar* earth, that is, *a* merely ſounded; whence the *Engliſh* term earth, by the addition of the particle *the*, the *Greek* era, and the *Latin* ora and terra by tranſpoſition; but as the *T* in *Terra* expreſſes poſſeſſion, it renders the ſenſe of that term, *earth poſſeſſed*, or land. By adding the *r* to the *e* was formed the *Celtic er*, water, or a ſound upon *e*, to which *b* ſignifying life, motion, *&c.* being prefixed, made *ber* ſpring water, whence the *Latin*, *ver* a ſpring; *au* alſo in compoſition ſignifies ſpring water, tho', in its primary ſenſe, only a ſpring, as appears in the lexicon; the common *Celtic* word for water is *dur*, ſeemingly a compound of *id-au-er*, it is ſpring water; the *Greek* term *Ydor* is from the *Celtic Y-dwr*, the water, and the *Engliſh* term ſeems to be from *au-dwr*, and of this *au* by the addition of the letter *c*, which ſignifies action or motion, was formed the *Latin* term *aqua*, and which ſenſe theſe particles bear through all the languages.

Having thus proceeded in the work, as to the reſt of the alphabet, I went on with the explanation of particles, compoſed a general grammar, and continued the preface, with ſeveral diſſertations on the origin of language and nations, and ſome critical remarks on the earlieſt parts of ancient hiſtory. The book likewiſe contains an etymological lexicon of the before mentioned four languages, defining the vocables in this new way: and alſo, an hiſtorical and topographical lexicon of all ancient names and various matters of antiquity; of which I may ſend you a ſpecimen for ſome future paper.

I am Yours, &c.

Row Jones.

To the Author of the General Magazine.

Proposals *for a* LITERARY SOCIETY.

THE encouragement of *literature* in general, and the ſtudy of *eloquence* in particular, are undoubtedly objects worthy the attention of the moſt exalted mind: and as the advantages ariſing from them have already been largely expatiated on by men of the pureſt taſte and ſoundeſt erudition, it will be at preſent unneceſſary to ſay more upon the ſubject, than that it behoves all perſons of fortune and public ſpirit to lend their utmoſt aid towards the improvement of ſcience, and that uſeful branch of education (ſo long neglected) which, when once become general, will ornament as well the *private life*, as the *ſenate*, the *pulpit*, and the *bar*.

Though this age may be deemed an age of diſſipation and luxury, ſtill there are ſome friends to virtue and their country remaining in theſe kingdoms: of this we have, perhaps, the moſt ſtriking inſtance that any time or nation has produced; in *the Society for the Encouragement of Arts, Manufactures and Commerce*; a Society, which has ſubſiſted but ten years, and yet conſiſts of near two thouſand five hundred members; a Society, that beſtows not leſs than four thouſand pounds yearly, for the encouragement of the

the various arts that contribute to the convenience and ornament of life; what advantages muſt ariſe from ſo glorious an inſtitution! and how greatly ought we to honour the firſt inſtruments of its erection!

But as the objects in queſtion fall not under the cognizance either of this or the *Royal Society*, (the one being confined to *Arts*, *Manufactures*, and *Commerce*, the other to *Philoſophical Studies*) a body of gentlemen, who are ſincere lovers of their country, and perhaps have ſome little diſcernment in literary merit, fired by a noble ambition of imitating ſo great a pattern, are determined to exert their utmoſt efforts to animate the body of ſtill-born literature, and rouze the ſpirit of expiring eloquence.

Theſe gentlemen, who would be known by the name of the LITERARY SOCIETY, flattering themſelves they ſhall, for their good intentions, meet with the approbation and aſſiſtance of all men of fortune and learning, do here preſume to lay the heads of their plan before the public.

As mankind are often deprived of very ingenious performances, through the inconvenience and unhappineſs many authors labour under, in not being able to give birth to their productions, owing to an inability of ſupporting the expences of printing and publiſhing; and as men of learning (driven to the neceſſity of parting with their copies to bookſellers, who, through a fear of riſk, give them frequently little or nothing in proportion to the merits of the piece) are often crampt in their genius, and ſeldom, if ever, reap the due rewards of their labour, this ſociety propoſes,

I. To eſtabliſh a Printing-Office under the following regulations.

They will receive every production in manuſcript that may be offered, and if approved of by a committee appointed to examine into the ſame, immediately put it to preſs, run the whole riſk of printing and publiſhing, and after deducting the expences and cuſtomary profits * allowed to the trade, give the author all monies ariſing from the ſale of it.

The committee to conſiſt of no leſs than ſeven, as many more as pleaſe; to prevent partiality, the author's name ſhall not be known to any but himſelf; and to avoid giving offence, the committee, after examination, ſhall give their voice whether it ſhall go to preſs or not, by ballot.

When this ſociety is eſtabliſhed, authors of approved pieces, ſhall, by a petition, if the collective body thinks fit, have, for their further encouragement, ſome monies advanced even before publication.

II. They will every three months, publiſh an account of ſuch pieces as ſhall iſſue from their preſs, with remarks digeſted from the opinions of a learned committee: the ſale of theſe remarks to be added to the fund, and become the property of the Society.

III. As this Society increaſes, they propoſe to give premiums, as ſhall hereafter be determined, to authors of pieces either in the *Greek*, *Latin*, or *Engliſh* languages

IV. They will alſo eſtabliſh an academy under their patronage, ſolely for the ſtudy of eloquence, and give premiums to thoſe who make the greateſt progreſs.

Noblemen and gentlemen are hereby invited to ſubſcribe what ſums they pleaſe (not leſs than one guinea, yearly) for which they ſhall from time to time, receive an equi-

* Theſe profits to become the property of the Society, as a fund for other laudable purpoſes.

lent in copies of productions iſſued from their preſs.

N. B. All ſubſcribers will, in conſequence of ſuch ſubſcriptions, become members.

As a ſtill farther encouragement, every gentleman that may have appeared, or ſhall appear with credit in the literary world, ſhall for the yearly ſubſcription of *one* guinea, have a copy of every production, as well as if he was to ſubſcribe *twenty*.

As the admiſſion of Bookſellers or Printers into this Society, may be a means of retarding its ſucceſs, it is hoped no gentleman in that way of buſineſs will take it amiſs that his ſubſcription cannot be received.

Any perſon deſirous of further information, may apply to *Thomas Price, Eſq; Cleveland-row, St. James's; or the Rev. Dr. Truſler, at the Star, in King-ſtreet, Covent-garden*; where printed Plans are delivered.

The firſt general meeting will be about Chriſtmas next, of which public notice will be given, as to time and place, and at which all ſubſcribers are deſired to attend.

To the Editors of the General Magazine.

GENTLEMEN,

As you are pleaſed to determine favourably with reſpect to my laſt, I now, agreeable to my promiſe, encloſe you the following, and remain with eſteem,

Gentlemen,

Your obedient humble Servant,

Halifax, Sept, 22, 1764. JOSEPH PRIESTLY.

PRACTICAL RULES *deduced from the preceding Theory (page 474).*

IN order to reduce the foregoing propoſitions to practical rules, ſo as to be able on a plane ſurface to draw lines that ſhall have the ſame effect with thoſe mentioned above, (and which we have ſhewn will give the perſpective appearance of the different objects there conſidered) it will be neceſſary to imagine the planes formed by the lines drawn in Fig. 1. to be prepared in the following manner.

ART. 22. Let the plane K M O H (vide fig. 1.) revole on the line H O, till it coincides with the upper part of the picture H O Q P; the ground plane muſt be ſuppoſed to turn on the line G L, till it and the picture become one continued plane, and ſuppoſe the points, lines, &c. to be drawn on the under ſide in the ſame manner they are upon the upper; laſtly, let all the planes thus prepared revolve together on the line P G conſidered as an axis, till G L becomes coincident with G D.

23. This done, let us turn to *fig.* 2. where the planes thus prepared are drawn, that is, G L O H is the picture, G L N T the ground plane, *&c.* E, the ſeat of the eye, E C its diſtance and C R its height.

24. The line *a a* perpendicular to the picture having its vaniſhing point at C the Center (17) draw C a for its indefinite image (20).

25. The line b b parallel to the picture, having no vaniſhing point, in order to determine in what part of the picture its repreſentation is to be drawn, let us turn to fig. 1.—Since we know the image *b b* (fig. 1.) is parallel to the ground line G L, (18) if *one* point in the line be determined, the poſition of the whole is known; this premiſed, we have the point n common to both the lines a a and b b; and ſince the image

Fig. 2.

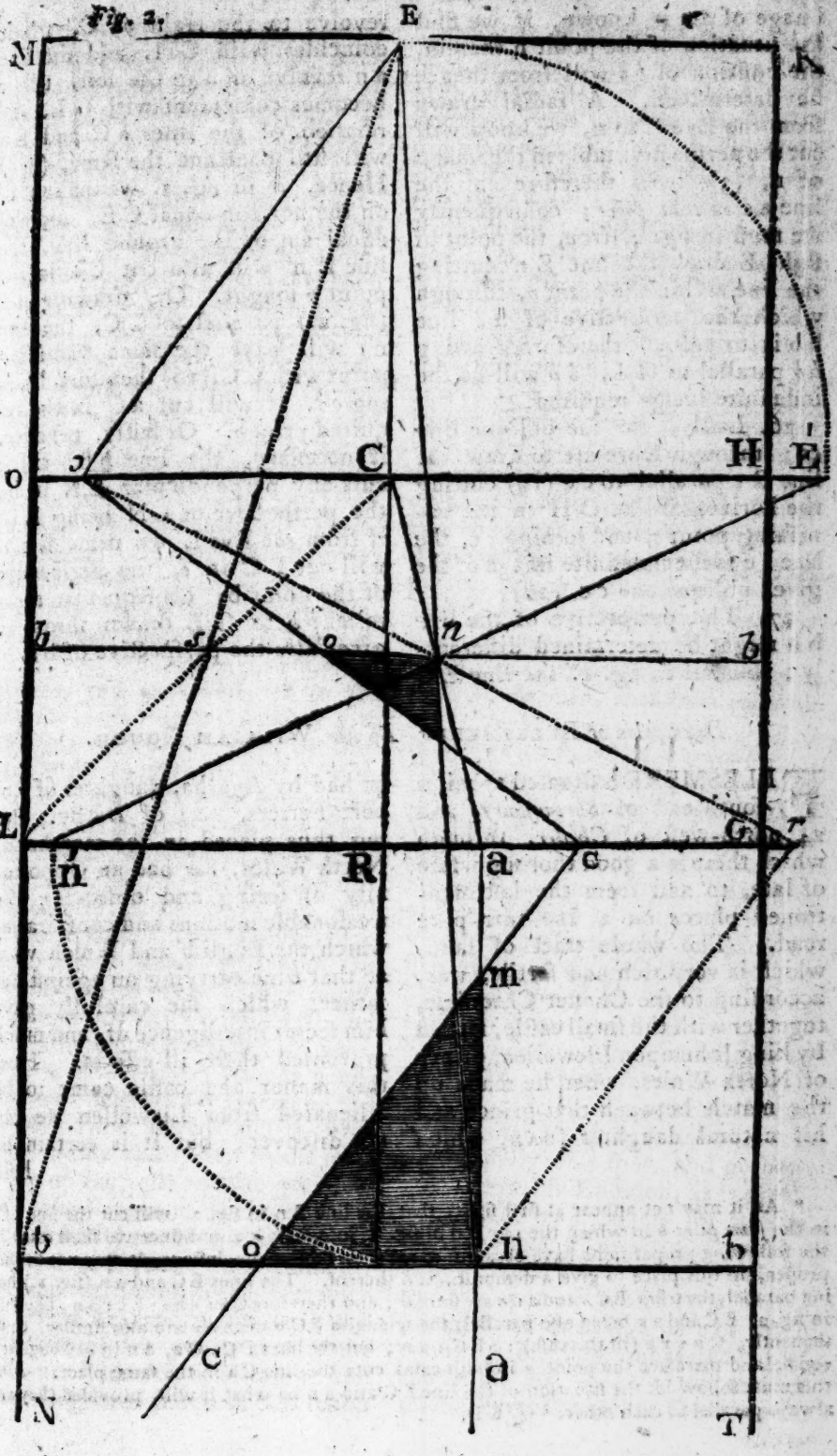


image of a a is known, if we find the ſituation of the point n therein, the poſition of *b b* will from thence be determined. A radial drawn from the Eye E to n, we know will cut the perſpective table in the image of n, (3) 'twill therefore cut the line a c in *that point*; conſequently we muſt in fig. 2. from the point of ſight E draw the line E n cutting the line a C in the point *n*, through which the perſpective of the line b b is to paſs;* therefore drawing *b b* parallel to G L, *b b* will be the indefinite image required.

26. Laſtly, for the oblique line c c; through E we are to draw the line E *c* parallel to c c (19) cutting the horizontal line O H in the vaniſhing point *c*, and joining *c* c, the line *c* c is the indefinite image of the given oblique one c c. (20)

27. The perſpective of the line b b might be determined differently; thus, if in fig. 1. the line E C revolve to the right on C, till it coincides with C H, and the line a n revolve on a to the left, till it becomes coincident with G L, the relation of the lines a C and E n will ſtill continue the ſame, (25*) Hence, if in fig. 2. we make C E′ on the horizon equal C E, and a n′ equal a n on the ground line, the line E′ n′ will alſo cut C a in the point *n* ſought. Or, drawing n r (fig. 2.) parallel to C C, the line n r will have the ſame vaniſhing point with C C, (16) therefore drawing *c* r, it will cut a C in the required print *n*. Or laſtly, produce, if neceſſary, the line b b, till it cuts any perpendicular L N in b; the perſpective of L N being L C, if from the Eye E we draw E b it will cut L C in *s*, the perſpective of the point b; conſequently a parallel *b b* to G L drawn through *s* gives alſo the perſpective of b b.

Deſcription of ELLESMERE. *By Mr.* WILLIAM GOUGH.

ELLESMERE is ſituated 17 miles ſouth-eaſt of *Shrewſbury*, and 24 north-weſt of *Cheſter*, through which there is a good thorough-fare of late, to and from the laſt mentioned places on a fine turn-pike road. The whole tract of land, which is very rich and fertile, was, according to the Cheſter Chronicle, together with the ſmall caſtle, ſettled by king John upon Llewellen, prince of North Wales, when he made up the match between that prince and his natural daughter JOAN, which he had by Agatha, daughter of Robert Ferrers, earl of Derby. Being thus placed in the marches of North Wales, ſhe had an Opportunity of ſeeing and obſerving the treaſonable motions and conſpiracies which the Engliſh and Welch were at that time carrying on againſt her father, which ſhe carefully gave him ſecret intelligence of, and much prevented their ill-effects. How this manor and caſtle came to be allienated from Llewellen we can not diſcover; but it is certain he held

* As it may not appear at firſt ſight, that the line E n in fig. 2. will cut the line a C, in the *ſame point n* in which the ray E n in fig. 1. interſects it; and ſince we ſhall often in the following propoſitions have occaſion to inſiſt on ſimilar concluſions, it may not be improper, in this place to give a demonſtration thereof. The lines E C and a n (fig. 1.) being parallel, the trian. E C *n* and a n *n* are ſimilar; and therefore C *n* : *n* a : : E c : a n; likewiſe in fig. 2. E C and a n being alſo parallel, the triangles E C *n* and a n *n* are alſo ſimilar, conſequently, C *n* : *n* a (in this caſe) : : E C : a n; but the lines E C, C a, a n in each fig. are equal, and therefore the point *n* in both caſes cuts the line C a in the ſame place. And this muſt follow let the ſituation of the line E C and a n be what it will, provided they are always parallel to each other. Q. E D.

held them not long, for the cuſtody of the caſtle was, in the thirty-third year of the reign of Henry III. in the hands of John le Strange, of Knockin, and was continued to his ſucceſſors as long as the heirs male of the family laſted. But it ſeems, that afterwards the manor of this place was in the crown; for Hammond le Strange, a colateral branch of the ſame family, continuing ſteddily loyal, when Montfort, earl of Leiceſter, with many other barons, revolted from king Hen. III. [reign, fifty firſt year] the king, to reward his fidelity, gave him this manor of Elleſmere and Stretton, until he could otherwiſe beſtow on him lands elſewhere of one hundred pounds per annum. It is probable that was done, and the caſtle and manor of this place returned to the crown, for it appears that Oliver de Ingham, who was a perſon of great action in his time, and well deſerved of the king for many ſpecial ſervices was made governor of this caſtle by king Edward II. in the fourteenth year of the reign. We obſerve nothing more of this place till we find Thomas Egerton, the great lawyer (created baron of Elleſmere) who ſtudied the law in Lincoln's Inn, and became ſo famous for his knowledge therein, that queen Elizabeth, in the thirty-third year of her reign, made him her ſolicitor general, and afterwards, in the reign 34th year, raiſed him to be her attorney general, from which advancement he was ſoon after, for his merits, promoted by the ſaid queen to the maſterſhip of the rolls and the great office of the keeper of the great ſeal, which he held to that queen's death. King James I. found him in that office, and was ſo highly pleaſed with his venerable gravity and wiſe management of his place, that in the firſt year of his reign he raiſed him to the Degree of Baron of this realm by the title of Lord Elleſmere, and then or ſoon after made him lord high chancellor of England, and fourteen years after he was further dignified with the honour of viſcount Brackley, which he had enjoyed but two years, and then died at York-houſe in the Strand, *anno domini* 1617. His poſterity now are Dukes of Bridgwater, whoſe eſtates in this pariſh are very conſiderable, amounting to more than eleven thouſand pounds *per annum*. The church is a fine old ſtructure, built in the Gothic taſte, is ornamented with a good altar-piece, and a ſmall though neat muſical organ, and has eight good bells in its ſteeple. There is a remarkable epitaph on a tomb-ſtone in the church-yard worthy of notice, which is as follows,

Interr'd here lies, one hundred years and four,
No one knew ſcripture leſs and virtue more;
Peace his ambition, contentment was his wealth,
Honeſty his pride, his paſſions health,
The father's duty and the huſband's guide,
By nature good, the age's wonder dy'd.

William Parks died at Lee in this pariſh; died March the 5th, 1746. He was a workman to Mr. Hatchett of Lee's family 70 years; he ſerved Mr. Stephen Hatchett, Richard his ſon, Richard his grandſon, Edward his great-grandſon, and Bulkeley his ſon's great-grandſon.

The bowling-green ſtands on an eminence, where formerly the caſtle ſtood, it is of a circular form, in diameter about ſixty yards; it is a moſt delightful ſpot, and perhaps not its equal in England, it is greatly admired by ſtrangers for its fine ſituation and proſpects; there is a new ſummer-houſe lately rebuilt thereon, out of which you have a proſpect of one city, part of ſeven counties, one large inhabited caſtle, the ruins of two, three market towns, ſixteen churches, four chapels,

thirty

thirty gentlemen's ſeats, and forty mountains and hills. At the diſtance of about one hundred yards from the bowling-green is a meer or large pool of water about three miles in circumference; to the eaſt of which is Oatley Park, noted for fine roe deer. The buildings in the town of late are greatly improved, has a good market eſpecially for corn, &c.

A Deſcription and Uſe of the Compound Aſtronomical Tranſit-Inſtrument.

IT having been found by Experience almoſt, if not altogether impracticable, to make the face of a Mural Quadrant a true plane; wherefore the tranſit of the Stars over the meridian muſt be very precariouſly exhibited by it. Aſtronomers have deviſed another kind of inſtrument for this purpoſe not liable to error, which, from its uſe, is properly named a Tranſitory, or Tranſit-inſtrument.

Manfredi in his Ephemerides mentions one *Stancari* as the inventor of it. It is certain, however, that the famous Mr. *Roemer* deviſed and uſed one as long ago as about the year 1700, of which there is a Figure and Deſcription in *Peter Horrebow*'s *Baſis Aſtronomiæ*; but it was in ſeveral reſpects imperfect.

The vulgar uſe of the Tranſit-inſtrument is to correct the Motion of a Clock or Watch by obſerving, day after day, the exact time when the Sun or a Star comes to the Meridian; but it ſerves alſo for other very important uſes to be mentioned hereafter, and many more ſtill, when it is conſtructed in the manner I am going to deſcribe.

Fig. 1. repreſents ſuch an Inſtrument made firſt of all for Mr. *Le Monnier* the *French* aſtronomer, by the late Mr. *Jonathan Siſſon*, under the direction of Mr. *George Graham*, mounted and fixed up ready for obſervation.

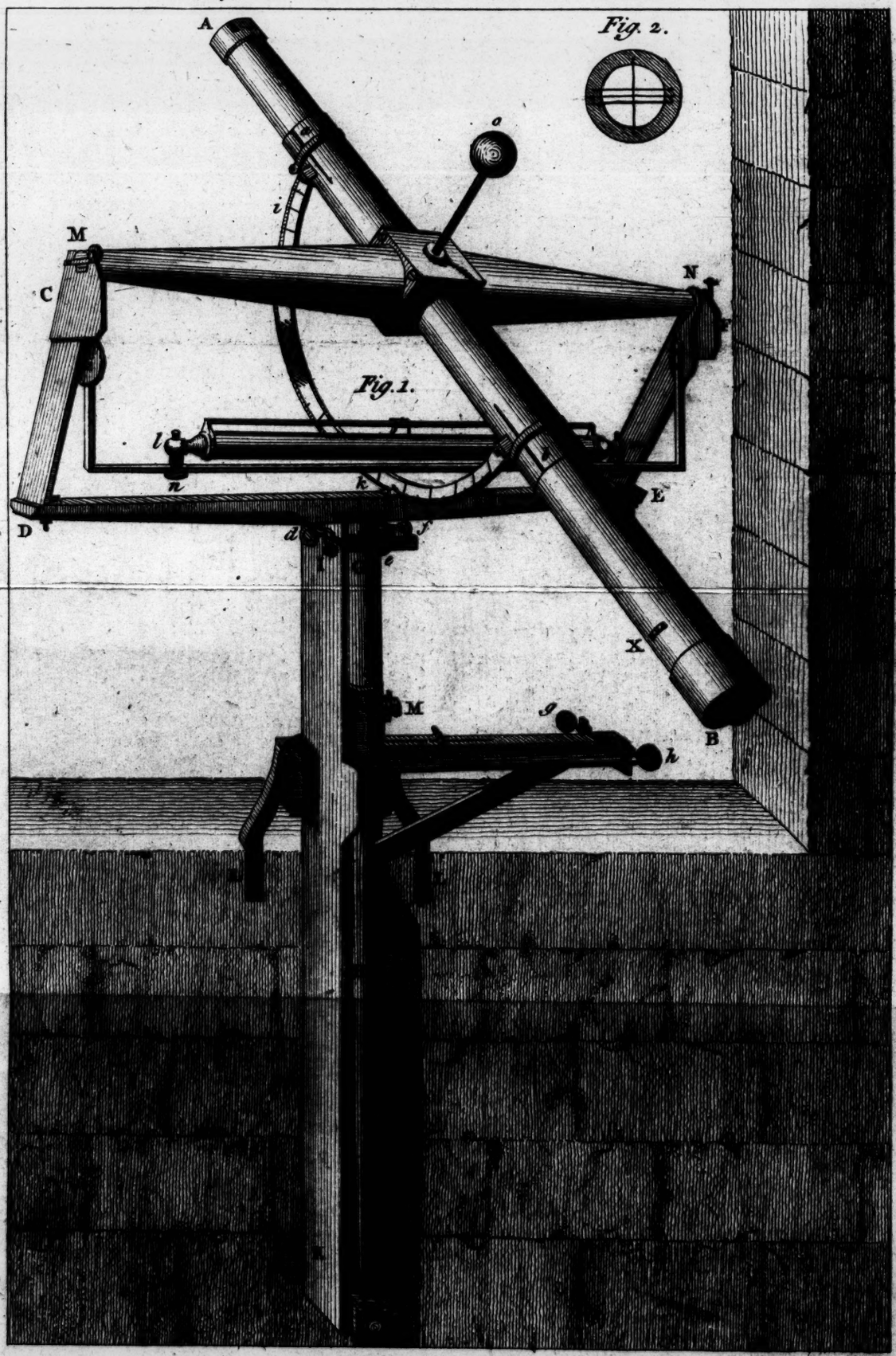
A B is a Teleſcope, which may be 3, 4, 5, or 6 feet long, whoſe cylindrical Tube fits exactly into another hollow cylinder *a b*, perpendicular to the axis; theſe ſeveral pieces are of the beſt hammered plate Braſs. The cylindrical extremities of this axis, M, N, are of ſolid Bell-metal, and wrought exquiſitely true and exactly of the ſame ſize, in a lathe. And it is on the perfection to which the Cylinders or Trunions are turned that the juſtneſs of the inſtrument depends. In the common Focus of the Object-glaſs and Eye-glaſs is placed a Reticle, Fig. 2. conſiſting of three horizontal and parallel fine ſtretched Silver-wires, fixed by pins or ſkrews to a Braſs circle, the middle one paſſing through its centre, with a fourth vertical wire likewiſe paſſing through the centre, exactly perpendicular to the former three.

The horizontal axis M N, fig. 1. is placed on a ſtrong Braſs Frame, into the middle of which a ſteel cylinder is fixed perpendicularly, being turned truly round, and terminating in a conical point at its lower extremity; where it is let into to a ſmall hole drilled in the middle of a Dove-tail ſlider, which ſlider is ſupported by a hollow cube fixed to the ſupporting piece I K, conſiſting of two ſtrong Plates of Braſs joined together at right angles, to which are fixed two Iron Cramps L L by which it is faſtened to the Stone-wall of a South Window.

The upper part G of the Steel Spindle is embraced by a Collar *d e f*, being in contact with the blunt extremities of three ſkrews, whoſe particular uſe will be explained by and by. M is another cylin-

drical

The Compound Astronomical Transit Instrument.



For the General Magazine.

drical collar cloſely embracing the Steel Spindle at about a third part of its length from the top, by the means of a ſmall ſkrew it may be looſened or pinched cloſe as occaſion requires. From the bottom of this collar proceeds an arm or leaver acted upon by the two ſkrews, *g*, *b* whereby the whole inſtrument, excepting the ſupporting piece, may be moved laterally, ſo that the Teleſcope may be made to point at a diſtant mark fixed in the vertical of the Meridian.

i k is a graduated Semi-circle of thin Braſs, ſkrewed to the Teleſcope, whereby it may be elevated ſo as to point to a known celeſtial object in the day-time.

l m is a ſpirit-level parallel to the axe of rotation of the Teleſcope, on whom two trunnions hangs by two hooks at M and N. Along the upper ſide of the glaſs tube of the level ſlides a pointer to be ſet to the end of the air-bubble; and when the poſition of axis of rotation is ſo adjuſted by the ſkrews, that the air-bubble keeps to the pointer for a whole revolution of the inſtrument, the Spindle G H is certainly perpendicular to the horizon, and then the line of collimation of the Teleſcope deſcribes a circle of equal altitudes in the Heavens.

When the level is ſuſpended on the axis, raiſe or depreſs the tube of the level by twiſting the knob of the ſkrew *n*, till you bring either end of the air-bubble to reſt at any point towards the middle of the Tube, to which ſlide the Index, then lift off the level, and turning the ends of it contrary-ways, hang it again on the trunnions; and if the air-bubble reſts exactly againſt the Index as before, the axis of rotation is truly horizontal: If not, depreſs that end of the axis which lies on the ſame ſide of the pointer as the bubble does, by turning the knob of the ſkrew at N, till the bubble returns about half way towards the pointer. Then, having moved the pointer to the place where it now reſts, invert the ends of the level again, and repeat the ſame practice till the bubble reſts exactly at the pointer, in both poſitions of the level.

If after the Teleſcope is turned upſide down, that is, after the Trunnions are inverted, end for end, you perceive that the ſame points of a remote fixed object is covered by the vertical wire in the focus of the Teleſcope, that was covered by it before the inverſion, it is certain that the line of Sight, or Collimation, is perpendicular to the Tranſverſe axis; but if the ſaid vertical wire covers any other point, the braſs circle that carries the hairs muſt be moved by a ſkrew-key introduced through the perforation in the ſide of the Tube at X, till it appears to biſect the line joining thoſe two points, as near as you can judge; then, by reverting the Axis to its former poſition you will find whether the wires be exactly adjuſted.

Note, the ball *o* is a counterpoiſe to the Centre of Gravity of the Semi-circle *i k*, without which the Teleſcope would not reſt in an oblique elevation, without being fixed by a Skrew or ſome other Contrivance.

The ſeveral before mentioned verifications being accompliſhed, if the Teleſcope be elevated to any angle with the horizon, and there ſtopped, all fixed Stars which paſs over the three horizontal Wires of the Reticle on the eaſtern-ſide of the Meridian in aſcending, will have preciſely the ſame altitudes when in deſcending they again croſs the ſame reſpective wires on the weſt-ſide, and the middle between the times of each reſpective equal altitude will be the exact Moment of the Stars culminating, or paſſing the Meridian. By the Help of a good pendulum Clock, the hour of their

true meridional Tranſits will be known, and conſequently the difference of right Aſcenſion of different Stars. Now ſince it will be ſufficient to obſerve a Star which has north Declination, two or three hours before and after its paſſing the Meridian, in order to deduce the Time of its arrival at that circle; it follows, that having once found the Difference of Right Aſcenſion of two Stars about 60 Degrees aſunder, and you again obſerve the firſt of theſe Stars at the ſame Altitude both on the eaſt and weſt Side, you infer with Certainty the Moment by the Clock, at which the ſecond Star will be on the Meridian that ſame Night; and by this Means the Tranſit Inſtrument may be fixed in the true Plane of the Meridian till the next Day; when by depreſſing it to ſome diſtant land Objects, a Mark may be diſcovered whereby it may ever after be rectified very readily, ſo as to take the Tranſits of any of the heavenly Bodies to great Exactneſs whether by Night or by Day.

When ſuch a mark is thus found, the Teleſcope being directed carefully to it, muſt be fixed in that poſition by pinching faſt the End of the Arm or Lever, between the two oppoſite Skrews *g*, *h*; and if at any future Time, whether from the Effect of Heat or cold on the Wall to which the Inſtrument is fixed, or by any ſettling of the Wall itſelf, the Mark appears no longer well biſected by the vertical Wire, the Teleſcope may be eaſily made to biſect it again by giving a ſmall Motion to the pinching Skrews.

The Tranſit Inſtrument is now juſtly reckoned one of the moſt eſſential Particulars of the Apparatus of an aſtronomical Obſervatory.

Account of the new ſerious Engliſh Opera, *called* Almena, *written by Mr.* Rolt, *(author of* Eliza) *and compoſed by Mr.* Arne *(ſon of Dr.* Arne) *and Mr.* Battiſhill, *repreſented, for the firſt Time, at the Theatre Royal in* Drury-Lane *on* Friday *Nov. 2.*

THE general argument, as prefixed by the author, is as follows:

ISMAEL, in 1499, founded the race of the Seffies, or Prophets, which continued kings of Perſia till 1722; when Mohammed, or Maghmud, the ſon of Mir-Vais, and chief of the Afghans, who inhabited the province of Kandahar, ſhook off his allegiance to Shah Sultan Huſſein, the laſt king of the Seffie line; inveſted Perſia, defeated Huſſein's army at Gulnabad, took him priſoner, and dethroned him: after which Mohammed ordered moſt of the Perſian nobility to be murdered, and with his own hands maſſacred above one hundred of Huſſein's children, in the Palace-Yard; but ALMENA, one of his daughters, is ſuppoſed to have been ſpared, and Mirza, his nephew, to have eſcaped, who afterwards raiſed an army, and defeated Mohammed; whereby the royal line of Perſia was reſtored.

The characters are, *Mohammed*, uſurper of the Perſian throne, in love with Aſpatia, by Mr. *Vernon*.—*Mirza*, a young prince, nephew of the depoſed Sultan Huſſein, in love with Almena, by Mr. *Giuſtinelli*.—*Abudah*, a Perſian nobleman, formerly baniſhed by Huſſein for his love to Aſpatia, and afterwards Vizir to Mohammed, by Mr. *Champneſs*.—*Aſpatia*, widow of Huſſein, by Mrs. *Cremonini*.—*Almena*, a young princeſs, daughter of Aſpatia, in love with Mirza, by miſs *Wright*.—*Zara*, ſiſter to Mohammed, in love with Mirza, by Mrs. *Vincent*.—*Selima*, attendant on Almena,

na, by miſs *Williams*.—Prieſts of the Sun, officers, Guards, and attendants.—The Scene Iſpahan, the capital of Perſia.

The firſt act opens with Almena and Selima, who comforts her by telling her, that Mirza, her lover, is in ſafety, being protected by the prieſts of the Sun. [The firſt air, ſung by miſs Wright, is admirable.

The golden radiance of the ſun,
Mild glancing thro' the cedar bow'rs,
Renews the glories of the day:
The beauteous work's again begun,
Which nature freſhens, and impow'rs,
And every birds exalts its lay.

Sweet is the prime of florid June;
Sweet are the meadows as they ſmile;
And ſweet the rural minſtrel's ſong:
But ſweeter is the mind in tune;
Sweeter the heart unknown to guile;
And ſweeter where the virtues throng.

In ſcene II. Aſpatia enters, ſhocked at the thoughts of the tyrant, her huſband's murderer, courting her to his arms. She comforts her daughter, by telling her, that Abudah, though the tyrant's Vizir, is in ſecret their friend.

Scene III. preſents a hill planted with cedar and palm trees. In the middle of the ſcene, a fire burning on an altar. Gawrs, or prieſts of the Sun, ſtanding on each ſide. Mirza in the front. The riſing Sun ſeen at a diſtance [which had a very fine effect.]

Mirza is comforted by the chief prieſt, and an excellent hymn to the Sun is introduced, which had great juſtice done to it by Mr. Giuſtinelli.

Hail, ſource of light! whoſe genial pow'r,
(Fervid all nature's ſcenes around)
Thy glory bright diſplays:
Thus, at the fix'd and ſolemn hour
Devotion claims, this hallow'd ground.
With hymns reſounds thy praiſe.

This is followed by a noble chorus of Gawrs, or prieſts. After this all go out, on hearing that Mohammed's troops were coming; but with a declaration by Mirza, that he will not hide himſelf from their ſearch.

Scene IV. preſents the palace at Iſpahan, with Mohammed, Zara, Abudah, guards and attendants. Mohammed expreſſes an impatience to learn, whether Mirza is taken by thoſe ſent in ſearch of him, and is preſently informed by an officer that he is. [The ſecond air, ſung by Mr. Vernon in this ſcene, is excellent.]

The martial hoſt, and tented plain,
May fright the poor and timid ſwain,
Who never felt ambition's fire:
But nothing awes, or ſhould controul,
The truly great undaunted ſoul,
That dares to empire's height aſpire.

Mohammed going out with the reſt, orders Mirza to be brought before him; and in ſcene V. the tyrant is repreſented, ſeated on a throne, ornamented with the royal arms of Perſia, with Zara and attendants. Mirza is brought in chained, and after defying Mohammed's threats, but ſoftening at being told Almena lives (which Zara takes notice of) is ſent to priſon. He is carried off; and after Mohammed's departure, Zara, who remains behind, in ſcene VI. declares her ſecret affection for Mirza, and her intention to ſet him free.

Scene VII. preſents Aſpatia, Almena, and Selima, when the mother (Cremonini) ſings a very pretty air, expreſſive of *Hope*,

In hope to recompenſe his toil,
The lab'ring peaſant tills the ſoil;

In hope the mariner will brave
The dangers of the Caſpian *wave.*
Hope chears the ſlave that digs the mine,
And makes him ſigh for freedom's ſhrine:
For hope, when juſtice left mankind,
Soothing our cares, remained behind.

Almena being left, in ſcene VIII. comes in to her Mirza guarded. [Nothing can be more muſical, more melancholy, than the air which miſs Wright here ſings.] After a ſhort condolance between the lovers, Mirza is hurried out to priſon, and the act concludes with a fine, but very difficult, duet, between miſs Wright, and Mr. Giuſtinelli, whoſe performance did juſtice to the excellence of the compoſer.

Act II. The ſecond act opens with a pretty air by Mirza in priſon.

Untimely ſetting at the dawn,
My ſun of glory thus withdrawn,
No friendly beam ſupplies its ray;
Save what this glow-worm light a-round,
Sheds, dimly ſcatter'd o'er the ground,
In abſence of excluded day.

Scene II. comes in Abudah, who declares his fidelity to the houſe of Seffie, and hints to Mirza, to make uſe of Zara's affection for him to obtain his freedom. On Abudah's departure (ſcene III.) enters Zara, and contrives Mirza's eſcape in the diſguiſe of a ſlave among her train.

Scene IV. is the palace, and preſents Mohammed with Aſpatia, who rejects the tyrant's offer of his heart and throne with diſdain, on account of his having been the murderer of her huſband, and the conqueror of her country. [The firſt air in this ſcene is admirable, and was finely ſung by Mr. Vernon, as was alſo the ſecond by Mrs. Cremonini.] Aſpatia going off, Mohammed follows, threatening vengeance; and (ſcene V.) Zara enters, enraged at the flight of Mirza, and his boaſting his paſſion for Almena, on whom ſhe reſolves revenge. At this inſtant (ſcene VI.) the tyrant appears, and Zara eaſily works him up, who is already too much inflamed, to put out Almena's eyes. [The concluding air, in which the tyrant declares for revenge, was nobly ſuſtained by Mr. Vernon.]

Revenge can feed the famiſh'd ſoul,
And nothing can its rage controul,
When love is fled, and leaves deſpair:
If beauty wounds when it may ſave,
It nobly then becomes the brave,
To ſcorn the triumph of the fair.

So roll'd up in its thorny brake,
With poiſon ſwell'd, the turgid ſnake,
Elate a browzing fawn eſpies:
He ſudden darts along the plain
His golden creſt, and baleful train,
Till in his graſp the victim dies.

Scene VIII. preſents Almena alone in the Palace Garden, and the recitative accompanied, with which this ſcene opens, deſerves peculiar admiration.

Scene IX. Abudah comes in to her, tells her the horrid commiſſion he had received to put out her eyes, but declares his friendſhip, and adviſes her to deceive the tyrant by diſguiſing herſelf in ſuch a manner as if the inhuman purpoſe had been executed. He further comforts her by acquainting her, that Mirza was eſcaped, and that the prince, through his aid, would ſoon dethrone the tyrant. [The air here ſung by Almena (miſs Wright) is admirable.]

Act III opens with a ſcene of the Palace, and a view of the garden. Mohammed appears with Abudah, who tells him, that Almena ſits eyeleſs in a Cypreſs grove lamenting her woes, and that her mother

Aſpatia

Aſpatia is coming at his command. Abudah is then ordered to withdraw.

Scene II. Aſpatia enters, and ſings a very fine plaintive air. Mohammed then advancing to Aſpatia, Almena (miſs Wright) is heard to ſing behind the ſcenes an air complaintive of her blindneſs, which had a fine effect, and may vie with the celebrated one of *Total Eclipſe* in the Oratorio of Sampſon.

Where is pity's melting eye,
Beaming like the widow'd dove,
As ſhe heaves the tender ſigh,
Pining in the ſhady grove?

Where is nature's glorious robe,
Fair and ſplendid to the ſight?
Loſt the beauties of the globe,
Loſt to me in endleſs night.

This is admirably contraſted by another expreſſive of rage, which Aſpatia in going out addreſſes to the tyrant, [and which Mrs. Cremonini greatly filled.]

Scene III. Mohammed, being left alone, expreſſes remorſe; when ſcene IV. Abudah enters, and acquaints him, that Mirza is advancing with an army to the capital, having already defeated the troops ſent to oppoſe him. The guard of the city is committed to Abudah, and the tyrant declares his purpoſe of going himſelf in perſon againſt Mirza, and recovering what had been loſt.

Scene V. repreſents Almena with her attendant Selima, in the palace garden. [Here is a noble air by Miſs Wright (in character of Almena, expreſſive of her mother's affliction on her account) of which too much cannot be ſaid in praiſe, both with reſpect to the compoſer and the performer.]

They go off, and Scene VI. repreſents Aſpatia in the palace, with Abudah, who after informing her of the deceit practiced by her daughter, hints his pretenſions of love for Aſpatia, (for which he had formerly been baniſhed,) but is ſtopt from purſuing it any farther, 'till the ſtrife of war be ended. [Mrs. Cremonini concludes this Scene with an excellent air.]

Scene VIII. is the palace garden, where Almena is acquainted by Selima, that Mirza has conquered, having taken the tyrant priſoner, and that he is leading his victorious troops to the city. [Miſs Williams, in the character of Selima, here ſings a very pretty ballad air on the bleſſings of peace.

The ſweets of peace ſhall be our own,
And ſmiling plenty crown the plain:
'Tis peace adorns the monarch's throne,
And chears the cottage of the ſwain.

The riſing ſun ſhall bleſs the mead,
And fair the mountain olive ſpring:
The vine its richeſt cluſters ſpread,
When glory crowns a patriot king.

Aſpatia comes in to them, rejoiced at the happy tidings, and a ſweet duet is charmingly ſung between Mrs. Cremonini and Miſs Wright.

Scene X. preſents a view of the Royal Meidan, with the triumphal entry of Mirza into Iſpahan, accompanied by the Gawrs, (or prieſts) Abudah, officers, guards, and other attendants. A very fine chorus is ſung by the Gawrs.

Hail, victor, hail! with choral lay,
We celebrate this glorious day.
Perſia again ſhall nobly ſhine;
Freedom is ours, and glory thine.

After which is a noble air, which (though marked, as omitted, in the printed copies of the opera) was ſung by Mr. Champneſs, and had a great effect.

That

Thus when young Ammon *march'd along,*
Returning from his Indian *war;*
Through Nyſa's plain, the gazing throng
Attended his triumphal car.

With curling vines and ivy crown'd,
He mov'd victorious like a god;
The lyriſts hymn'd their ſongs around,
And love and joy before them trod.

In ſcene the laſt Almena enters, with Aſpatia. Mutual embraces (as we may ſuppoſe) paſs between them and Mirza, who ſings an excellent air, ſhewing the ſuperiority of virtue;

Fortune with a wanton joy,
Does her fleeting pow'r employ:
But firm enthron'd will virtue reign,
Though giddy fortune ſhifts the ſcene.

Nobly have we fought the foe;
Glory does its wreathes beſtow:
Now the victory is won,
Freedom ſhall our labors crown.

after which the opera finely finiſhes a very grand chorus,

Bright as the ſun ſhall virtue ſhine;
And, like a meteor, vice decline.
In flow'ry paths may fortune ſtray;
But juſtice keeps unerring ſway:
While mortals bear affliction's frown,
Angels deſcend with glory's crown.

Such is the conduct of this piece, which (as will appear by our ſuccinct account of it) is artful, and intereſting. — It has been too juſtly the reproach of compoſitions of this kind, that they are *verſus inopes rerum, nugæque canoræ*; that, provided the compoſer has his juſt meaſure of ſyllables, the meaning of the words is ſuppoſed to be of very little conſequence. However, ſuch a diſregard to ſenſe is deſtructive of the union which ought ever to ſubſiſt between poetry and muſic. Of the opera now under conſideration we may with juſtice ſay, that the poet has his ſhare of merit in it. The incidents ariſe naturally, and are probable: the characters well ſuſtained; the ſtile ſuitable; the ſentiments juſt; and the meaſure harmoniouſly diverſified.

With reſpect to the muſic it is ſufficient to ſay, that the recitatives are finely accompanied, the airs charmingly varied, and the choruſſes (which are compoſed by Battiſhill) are animated, and full of Harmony. The overture is very elegant, and the ſcenes, dreſſes, and decorations, magnificent and ſtriking. The band of muſic was compleat in all its parts, and conducted by Mr. Pinto.

To the Author of the General Magazine.

SIR,

THE following Memoir, written in *Latin* by Dr. *Wolf*, I have tranſlated for your very uſeful Magazine, hoping it may be of Utility to the Public, as there ſeems to be many Soils in *England*, which promiſe well for the ſame End. — It is the Way of making Saltpetre in *Podolia*.

Yours, &c. J. B.

BY far the greateſt part of the Salt-petre conſumed in *Europe*, comes from the *Eaſt-Indies*: almoſt all that is brought from the *Poliſh* and *Ruſſian Ukraines*, or the neighbouring provinces, is obtained by an Elixivation from Earth and Aſhes. Earth may be ſuppoſed to participate both of vegetable and animal ſubſtances; and it is a neceſſary Circumſtance that it ſhould remain a long Time quiet, uncultivated and deſart. Such is the Conſtitution of many parts of the Soil of

of the *Ukrain* and *Podolia*, as this country has lain uncultivated ever since about the third Century, when its ancient inhabitants, the *Getæ*, were driven out by the *Bulgarians*, whose posterity were more addicted to the breeding of Cattle, than to Agriculture. To which may be added the *Turkish* and *Cossac* Wars in the last Century which almost depopulated the Country; yet in these our Days new Colonies having, through its natural Fertility being induced to settle here, it is now sufficiently well cultivated.

This vastly extended Plain seems in a manner covered with black or dusky red earth, to the depth of some Inches, and sometimes a Foot, under which lies an Earth more or less white, chalky, calcareous, or a rock indurated out of some of these, intermixed with sea Shells of various Kinds, and in such Plenty, that in some Places it seems to consist wholly of them. Clay and Sand are rarely to be met with. This Earth is of so light a texture, and so easily dissolved in water, that it is carried away with it, and again restored to its dry State by very moderate Wind or Sun-shine, when it is very apt to rise in a fine black dust, fall upon the Cloths of Travellers and penetrate even to the Skin.

The Country-folks allow the Tokens of Nitre to be these; that the Earth or Mould be of a deep black, soft to the Touch, without any Sandiness, and easily reducible to an exceeding fine Powder: If it be dungy, it then must have a Kind of Fatness; if it discovers the cool Taste of Nitre; if it seems to have been left along while undisturbed; and a particular Symptom of its Richness, is a nitrous Efflorescence, in the Form of a white Down, which overspreads it; from which they also infer that some Town, Village, Sheep-fold, or Burying-place had formerly occupied the Spot. Above all others they are fond of searching for it in certain Hillocks, which they call, in their Language, *Mogely*. They are of a conical Figure, and undoubtedly artificial, and the Monuments of Battles fought there.* One of these, on account of its superior Size, is called *Szeroka Mogila*, or the Great Hill, near *Granow*, probably a very ancient one, has yielded Nitre continually for near a hundred years past. It is near three hundred Paces in Diameter, and seems, from the Shape of its Remains, to have been at least three hundred Feet high. It is commonly reported, that a certain Queen having an Express brought of a neighbouring King being oppressed by the Enemy, hastened with an Army to his Assistance, and through Misinformation, slew her own Husband; whether any human bones lie buried there, future Time must discover.

For manufacturing their Saltpetre, they make choice of a Place not far from a Spot rich enough in Nitre to keep them continually at Work for at least a whole Summer; and besides, such as can supply them sufficiently with Water and Wood at an easy Expence. The Utensils they employ, are called by one Name *Maydan*, and consist of the following Articles.

1. A large copper Boiler, containing about 60 *Amphors*, of 6 Gallons or about 54 pounds of water each.

2. 100 wooden Tubs, or Fats open on the Top with a Hole bored near the Bottom, which may be stopped occasionally; each of these holds a *Carr* of Earth, or about 4 or 5 *Amphors*.

3. Two

* Like the *Burrows* or *Barrows* on *Salisbury Plain*, and *Malborough Downs*.

3. Two very large Caſks of about 100 *Amphors* each.

4. Wide Troughs or Coolers to the Number of 32, holding an *Amphor* each, or ſomewhat more; in which the Cryſtallization is to be performed.

5. A ſufficient Number of *Amphors* for fetching Water.

A Pit is Dug in the Ground, of depth ſufficient for erecting a Furnace or Fire-place at the Bottom, and receiving the Boiler ſet in with Bricks over it, with its Brim on a Level with the Surface, over which Brim is conſtructed a circular Covering or Border of Wood about eight Inches high, and this lined with Lute to keep the Ley from boiling over. The two great Caſks are placed at a ſmall Diſtance, being deſtined to receive the Ley, which is conveyed into them by Hand-ſcoops.

The nitrous Earth is firſt of all beat to a coarſe Powder with Iron Spades, and cleared of Stones and other hard Subſtances, laid lightly in Heaps, and then brought to the Furnace. If it be very rich in Nitre (indicated either by its Fatneſs, or its downy Efflorescence) they mix with it ſome of a poorer Sort, in equal Quantity, but very black and old: That is, in the Language of the Chymiſts, with an animal Earth they combine one that is purely vegetable. And laſt of all, they add Aſhes, to the Amount of about a fifth Part of the whole, more or leſs, as beſt ſuits their Purpoſe, and mix them well together. The Aſhes they commonly make Uſe of are of the Aſh, which they have in great Plenty. If they have a Quantity of Urine at Hand they throw it in, but never any quick Lime. Thus they prepare a ſuitable Stock of Earth at the Beginning of the Summer, and continue to do ſo as long as is neceſſary, ſo as never to be in want of a freſh Supply. Some are ſo provident as to prepare before Hand a Quantity ſufficient to laſt them through the whole Courſe of the enſuing Summer. But the uſual Practice is to bring the Earth as ſoon as prepared, to the Furnace, which is done in the following Manner.

Into one of the abovementioned Tubs (N°. 2.) they put one *Carr* of the prepared nitrous Earth, that is, about four *Amphors*; then they fill up the Veſſel with cold Water, tho' ſome warm it, and add a Quantity of Aſhes, if none had been mixed up with the Earth, ſtirring the whole well with a wooden Staff; then they ſuffer it to ſtand twenty-four Hours, only ſtirring it by Times. After this Space they ſuffer the Ley to run out at the Hole near the Bottom, and put it into the two large Caſks, (N°. 3.) They clear the Tubs of the elixivated Earth and put in freſh, and thus the Operation is continued as long as the boiling of the Nitre laſts.

In this Decoction of the Nitre, what they call the Mother of Nitre is abſolutely neceſſary. This is the inſpiſſated Lixivium remaining after the Cryſtallization of Nitre, which cannot itſelf be made to cryſtallize: Wherefore, this they keep from one Year to the next. And for want thereof the Decoction muſt be continued at leaſt a Week before any Cryſtallization can be performed as it ought to be. The Reaſon of which ſeems to be, that the Lixivium is not ſuſceptible of a Degree of Heat ſufficient for ſending off the pinguious and alcaline Parts, which neceſſary Denſity is given it by the Mother of Nitre, as it contains a copious calcarious Earth diſſolved in the Acid of Salt and Nitre. When the lixivium has acquired this Pitch, the reſt of the Operation is ſoon performed.

Of

Of this Mother of Nitre they pour one or two Tubs into the Boiler, to which they add the new Ley collected in the great Caſks till the Boiler is full; then they kindle the Fire, and keep the Contents boiling near 24 Hours.

As ſoon as they perceive any Marks of Cryſtallization on the Surface, they remove the Ley thus decocted and inſpiſſated, into the thirty-two wooden Coolers deſcribed in N°. 4, and let it remain there twenty-four Hours; in which Time the Cryſtallization being compleated, they drain off the Mother of Nitre, and return it into the Boiler. The Cryſtals are taken out and dried; but as they never prove clean, they are again diſſolved in clean Water, filtred through a Flannel Bag, and boiled up again in a leſſer Boiler to a requiſite Thickneſs, and then cryſtallized again, which brings them to be fit for Sale. To the Mother of Nitre returned into the Boiler, they in like Manner add more freſh Ley from the two great Caſks, boil twenty-four Hours, and then cryſtallize. In this Manner is the Work carried on all the Summer, and till the Winter's Froſt puts a Stop to it.

One Day's produce they call *Doba*, amounting in Weight to at leaſt one *Kamien* or 14 *Oko*, that is, about twenty-four common Pounds. About one *Oko*, or three Pounds, is loſt in the Purification. A ſingle Pound of Saltpetre fetches in Time of War, upon the Spot where it is made, four Rubles (17 Shillings) but in Times of Peace it is much cheaper.

Now ſuppoſing one *Carr* or four *Amphors* of looſe nitrous Earth prepared with Aſhes to make four Cubic Feet; it follows that from 400 Cubic Feet of ſuch Earth, there may be obtained about forty Pounds of Saltpetre, and that one Pound of it reſides in ten Cubic Feet of prepared Earth, or in ſeven or eight Pounds of the more compact native Earth; though ſuch a Computation ſhould not be deemed very accurate.

The Earth thus cleared of its Nitre is caſt out of the Tubs in Heaps about four Feet high, and ſo left for the Space of four Years, at the End of which the *Maydan* are brought thither, and a like Quantity of Nitre is got out of this Earth as before. Upon a third working, after ſeven Years more, it ſtill yields ſome Nitre, but ſcarce enough to defray the Coſt.

I make no doubt but this Method of making Saltpetre, came hither from the Eaſt; and that it is done by a ſimilar Proceſs in *India* and *China*. Several Authors have deſcribed the Method of doing it in other Parts of *Europe*. They all require Earth and Aſhes, and in ſome Urine and quick Lime is employed. The Mixture is expoſed to the Air in all of them either open, or under Sheds. Some throw it up in Heaps, others depoſit it in Pits. Which ever Way it is done it infallibly produces Nitre, though in very different Quantities, and that chiefly in Proportion to the Fatneſs of the Earth.

Saltpetre is conſiderably different as to its Degree of Purity. The natural Sort of the firſt Decoction always holds a Portion of common Salt. Its Cryſtals are not priſmatic, but cubic, and it is much of the ſame Goodneſs as that which has a mineral alkaline Baſis, whether from common Salt or otherwiſe; for it aſſumes its Figure always from an Alkali, not from an Acid, notwithſtanding Dr. *Linnæus* has founded good Part of his Syſtem of Foſſils on this Error. If too much calcarious Earth, and too little Aſhes be

combined in the Decoction, the Cryſtals will not be ſo hard, and if diſſolved, may be precipitated by an Alkali, which good Nitre will not ſubmit to. If the Aſhes be from hard Wood, the Cryſtals will be firmer and larger, as are thoſe of *India*. If the Earth has any metallic Intermixture, eſpecially of Iron, it will impart a Tincture to the Nitre. Hence the *Indian* Saltpetre is of a rediſh Hue, and the Fumes of the *Aqua Fortis* made from it are remarkably red in Compariſon of thoſe from the *Poliſh*. This latter mixed with *Engliſh* Vitriol, yields a green *Aqua Fortis*, which turns a precipitated Solution of *Mercury* yellow, and by Cohobation, white. In a Word the Chymiſts give the Preference to the *Poliſh* Saltpetre in all Operations.

Nitre may be purchaſed at a much eaſier Expence of the *Engliſh*, *Dutch*, *Poles*, and *Ruſſians* than it can be made for at Home; the Reaſon of which is the Cheapneſs of Wood Fuel, which may be had, in a Manner, for fetching. In the *Pruſſian* Dominions alone, there is, perhaps, more Saltpetre made, than in all *Europe* beſides; and yet I do believe that ſcarce a thouſandth Part of what was conſumed in the late Wars, was of *European* Produce. Earth rich in volatile Salt and nitrous Particles turn to far better Account in manuring Land, and feeding the Inhabitants, than in furniſhing deſtructive Saltpetre, which ought rather to be fought after in barren Deſerts.

Dr. Wolfe's *Sentiments concerning the natural Origin of Nitre, will be inſerted in our next Magazine.*

Hints and Obſervations for the Improvement of Agriculture.

Continued from Page 436.

Two Methods of deſtroying the Dolphin-Fly which attacks Beans.

As much damage is often done in bean crops by the dolphin fly, any thing that may tend towards remedying ſo great an evil, cannot but be acceptable to our readers.

It is generally after a long drought that this black fly proves ſo very deſtructive to all ſorts of beans: I am apt to think that they are more particularly tempted to attack this crop, by the ſap which exſudes from the pores of the plant being more ſuited to their taſte than the ſap of any other vegetable.

It may poſſibly be the food deſigned for them by nature; and this is more probable, as they increaſe ſo faſt on beans, and are ſcarcely found elſewhere.

Being in a weak, and perhaps infantine ſtate, when they firſt attack the beans, it is natural to imagine that they ſhould prey upon the moſt tender part, and that which is beſt adapted to give them a ſupply of ſap, or, perhaps, of tender food in a condition to be macerated by their yet-delicate organs: the top therefore of the vegetable is the place where they are firſt ſeen; there they begin their ravages, and ſpread downwards, till they have deprived the farmer of the pleaſing hopes he had entertained of having a good crop.

It would be ſome alleviation of this misfortune, if, when the inſect firſt attacked the crop, the farmer ſhould ſend into the field one or more men, provided each with a ſcymeter or hanger: with theſe they could eaſily lop off the heads of the beans, by which means a crop has been often ſaved; for this fly is ſeldom known to riſe again when

when it once falls with the bean-top to the ground. Another remedy may be applied for this evil; but it is only practicable in small plots, which lie near the home-stall: the remedy I mean is, to turn all the turkeys and poultry into the field: these will devour an amazing number of the insects, and have often been known to save a crop of beans.

Method of making Somersetshire *Bacon.*

PErhaps some of your readers may love bacon; and as we in this town have what is very good, I will let you into the secret in what manner I make it.

Any time betwixt this and Christmas is a good season. I generally salt my pork in large wooden troughs. When I kill a large hog for bacon, I lay the sides in the troughs, and sprinkle them pretty heavily with bay-salt, for I use no other: I then leave them twenty-four hours to drain away the blood, and some of the over-abounding juices.

After this, I take them out, wipe them very dry, and throw away the drainings. I then take some fresh bay-salt, and, heating it well in a large frying-pan of iron, I rub my meat till I am quite tired; and this I do for four days, turning it every other day.

If the hog was large, I keep the sides in brine (turning them ten times) for three weeks; after which I take them out, and have them thoroughly well dried in the usual manner: but you must observe, that I have them well dried, or they would not keep so well, nor eat so fine.

I have several times mixed some coarse sugar with my bay-salt, and thought it gave the bacon a mellower flavour; but then I also conjectured soon afterwards, that the bacon thus cured did not keep so well as the other, but grew rusty sooner; yet I am not sure of this, as it might be owing to some accident.

Some useful Observations on Malting.

THE first thing, with regard to malt, is the benefit of changing the water whilst it is steeping.

Some maltsters think this change of water no ways necessary; others, on the contrary, approve of it, but do it indiscriminately in the same proportion during the whole season. They are in both respects wrong; for the times when the water requires to be changed oftenest are at the beginning and latter end of the season, in autumn and spring, when the weather is warm; for in the middle of the winter the weather is too cold to admit of the water being at all changed to any advantage. Suppose the barley to be left in steep forty-eight hours in the spring: if the weather is inclinable to be warm, the water may be in that space of time changed three times; in other cases twice may be enough; but the best rule to go by, is that which follows.

Every maltster must know, that in the autumn and spring, if barley is left too long on the steep in the same water, the water will grow slimy, and sometimes sour: now I would advise the master to watch the changes of the water, and when he finds that it is smooth and oily

to the touch, and that it is inclinable either to ſmell or taſte ſour, let him by all means have it inſtantly changed; but he muſt obſerve, if he regards his intereſt, a particular method even in doing this.

The uſual way of changing the water is, firſt to draw off that in which the barley was ſteeping, and afterwards, by pailsful, or by pumping, fill the ciſtern again.

This I do not approve of, becauſe the barley when the water is drawn off lies cloſer, and is apt, in a very ſhort ſpace of time, to heat: this is a great damage to the commodity, and, without precaution, a conſiderable loſs enſues. Now my method has always been, firſt to get a hogſhead of water in readineſs near the ciſtern, which I cauſe to be thrown on the barley the inſtant the firſt water is drawn off; and as a hogſhead of water is ſufficient to wet eight buſhels of barley, I add afterwards as many hogſheads, ſave one, as my ciſtern will wet quarters. By theſe means I avoid the danger of the barley heating in the ciſtern.

The conſequences of not changing the water whilſt the barley is ſteeping, are often fatal to the malt, which either proves flat and inſipid, ſhewing its qualities in the liquor that is brewed from it; or it acquires a muſty diſagreeable taſte, which the beer fails not to retain.

I have always been of opinion, that river water is beſt for the purpoſe of ſteeping barley intended for malt; hard ſpring water is certainly the worſt that can be choſen: the malſter will do well to try the ſeveral ſorts of water near his houſe with ſome white hard ſope, ſuch as is made at Nayland; and that which lathers ſooneſt is moſt ſuited to his purpoſe.

I have already obſerved, that in the ſpring and autumn it is neceſſary to change the water often in which the barley is ſteeped: it ſhould likewiſe be remembered, that in theſe ſeaſons the making of malt, in all its parts, is a very critical buſineſs; particularly it is then neceſſary that the beds, or couches, ſhould be frequently turned, or the malt will not come kindly; but the tap root will be apt to ſhoot forth vigorouſly, ſtarving the other roots, and preventing them from accompanying it in its growth: this muſt be checked, and the remedy is, to turn the couch often, ſpread it thin, and give it a ſufficient quantity of air, at the ſame time keep it cool and temperate. This will ſtop the progreſs of the firſt root, give the others time to ſprout, and the barley will malt kindly and regularly.

A thin-ſkinned fine coated barley is beſt for making malt, and it is not the worſe for not being very full bodied; yet would I by no means recommend a lean, half ſtarved unripe grain.

Barley, which has grown on lands highly manured, is not ſo good for making malt, as that which has been produced by land of a moderate richneſs without any manure: in fact, a luxuriant ſoil, whether naturally ſo, or enriched by art, is not, in general, beſt for yielding barley for the malſter's uſe.

For the reaſons abovementioned, never chuſe to buy barley from the farmers who have large crops, as it is moſtly a full-bodied grain they have to ſell. I prefer, for malting, a grain which is the produce of a ſoil that is rather poor than rich, rather light than ſtrong, and more inclined to a gravel than a clay.

This grain is clean-coated, taper, and elegant in its form, is full of flour, almoſt tranſparent when watered, and will be ſufficiently wetted in forty-eight hours.

This

This grain encreases in the malting, fills the bushel well, and makes a fine, sweet, wholesome, clean, full-bodied malt, from which the best of beer may be brewed, either brown or pale, according as the malt has been dried higher or lower.

Now I have mentioned drying of malt, a few cautions on that head may not be amiss.

My practice has been to give my malt as much drying as I could on the floor: this is not only a great saving of fuel to me, but is also attended with several other advantages.

I find that my malt, by being thus gradually divested of its outward moisture, does not shrink so much when it comes to be laid on the kiln; of course it measures to more advantage: it is besides of a better quality, having acquired no foreign taste in drying.

It may very easily be observed, that if malt is laid very damp on the kiln, a thick mist, or smoky vapour, will immediately arise from the surface of it, which, being repelled and condensed by the cold circumambient air, falls again on the malt, where, by the heat from the furnace, it is a second time rarified, and ascends in clouds of steam.

This alternate rarefaction and condensation of the moisture is of great disservice to the malt, giving it often a disagreeable musty flavour, and making it besides more unfit for keeping.

Now, by my method of suffering the malt to receive a part of its drying on the floor, this inconvenience is, in a great measure, avoided; for the gross moisture is already evaporated before it is laid on the kiln, and that which remains creates no great degree of steam, provided the fire in the furnace is not at first made to burn too fierce.

With this precaution I have often made pale malt as fine as I have any where seen, such as some gentlemen, who long dealt with me frequently, nay, constantly, praised. In drying this malt I took care that there was, during the whole time it was on the kiln, but a very moderate, yet equal, fire in the furnace.

If I had an inclination to have any malt high dried, (for some like brown malt better than pale) when the moisture was nearly evaporated, I caused the fire to be gradually encreased till it roared again in the furnace, taking care that the malt should be properly stirred, lest it proved kiln-burnt; and by this method I had a fine, sweet, brown malt, fit for making harvest beer.

Many are of opinion, that brown malt, used in the same proportion with the pale, will make the strongest beer; but this is certainly a mistake, for I have often made the experiment with great precision, but could never find any material difference, and what difference there was at any time, seemed to me to be rather in favour of the pale than brown malt: this may easily be accounted for, as the flour in the pale malt always remained sound and uninjured in the drying; whereas the brown malt would sometimes, notwithstanding all the care of the malster, be injured or parched by the fire, and that part which was parched had, of consequence, lost its spirit and virtue.

I must, however, on this occasion make one necessary remark, which is, that some pale malts are slack dried: these, I own, make a raw unwholesome liquor, which will not keep well; but if the pale malt is gradually and slowly dried by an uniform

uniform, gentle heat, it will certainly anſwer the character I have already given of it, and will, beſides, (I have experience for my voucher) keep as well as any brown malt whatever.

Malſters, in general, are too little nice in the barley they buy. I have already ſaid ſomething on this head, to which I ſhall add, that I would by no means have them ever bargain for mixed grain: what I mean by mixed grain is barley grown on various ſoils, and in different fields. There is a ſure diſappointment in buying ſuch grain, as the kerns will ſpire at different times, and ſome of them not at all; ſo that, after the couch is dried, ſome part of it will not be half malted, and a great deal of the remainder not malted at all.

In order to avoid this misfortune, for ſuch it is, as the maltſter's cuſtomers will, with too much reaſon, find fault with his commodity, let him by no means attempt to buy tythe barley, for that he is ſure is mixed: I experienced myſelf, many years ago, a great loſs by a purchaſe of the kind. A neighbouring farmer, with whom I was well acquainted, brought a ſample of barley to market: I looked at it, and though it was not very fine, I bought it, on account of his letting me have it ſix-pence a quarter cheaper than I could then buy of others: the lot conſiſted of one hundred quarters; but when it came home, and I had tried ſome of it, I think about ten quarters, I was greatly ſurpriſed to find the malt ſo bad, when, examining the barley with great attention, I ſoon diſcovered the reaſon of it. Meeting the farmer, of whom I had bought it, within a day or two afterwards, I aſked him how he came to ſell me mixed barley, adding, that I always thought he kept his grain with more care ſeparate: he ſoon unravelled the myſtery, by telling me, that it was the parſon's barley, not his own, which he ſold me.

When I heard this, I was not a little diſpleaſed; however, reſolving to make the beſt of a bad bargain, I carried a ſample of it to market the next day, and ſold it to a hog-feeder for eighteen-pence a quarter leſs than I gave for it. This was ſome loſs; however, I was glad to get off ſo well, as I would not have made the whole into malt, and have impoſed on my cuſtomers, for an hundred pounds.

To ſhew that I am not ſelf-intereſted, I will inform your readers of a method by which they may diſcover whether malt has been made of mixed, or, in part, unripe barley. Take a bowl of water; throw into it a couple of handfuls of the malt; give it a gentle ſtirring, and the barley which has not been malted will ſink to the bottom; the half-malted grains will have one end ſunk, being in a vertical poſition; and the true good malt will ſwim. This experiment I have often made, and never found it deceive me.

The ſame barley, though ever ſo good, will not malt alike well at all times: for inſtance, take it as ſoon as it is houſed, it comes well, but whilſt it is in its ſweat, by no means; yet after it has done ſweating, it comes well again.

In the ſame manner, barley which has been got in early in a very dry ſeaſon makes but indifferent malt; whereas the ſame barley, if it is left abroad till rain falls on it to looſen the huſk from the kernel, malts very well, and yields a large encreaſe.

Alſo, old barley, mixed with that of the laſt harveſt, does not malt well, for the reaſons above mentioned; it does not all ſpear, or put forth its beard, at the ſame time.

Theſe,

These, I know, are niceties which few maltsters attend to; yet am I certain that an observance of them, and some few more particulars, would encrease their profits nearly ten per cent.

A great many maltsters in this county, and in Essex, make prodigious quantities of malt for the London market; and there are often disputes happen, between the maltsters and the factors and buyers at Mark-lane, about the malt not holding out measure; the reason of which many of the country dealers are unacquainted with, and therefore know no other way of guarding against it than by throwing in a bushel or two extraordinary: this is some abridgement of their profits, and is besides often unnecessary. One reason for this deficiency is the avariciousness of the maker, who is willing to have as large an increase as possible, to the amount of six pecks in eight bushels: whereas, if the malt is intended for the London market, four pecks is all that can, with propriety, be allowed, for it must not be drawn too long; and this malt requires more cleaning by the screen, &c. than that sold in the country.

Malt, if it is not thoroughly cleaned, will heat in the hold of the vessel that carries it; and the tails, being loosened, will fall off; the necessary consequence of which must be a deficiency when it comes to be measured a second time, at the wharf or warehouse: now, to prevent any altercation or dispute, let the maltster always cause his commodity to be well screened before it is measured into the sacks to be carried on shipboard: he need then put up no more than the measure; he will gain himself a character as a clean good workman; and I will answer for it, that the factors, if he makes his malt according to sample, will readily give him one shilling a quarter more than his neighbours.

An Hertfordshireman.

Of staining paper, or parchment, of various colours.

Of staining paper, or parchment, yellow.

Paper may be stained of a beautiful yellow by the tincture of turmeric, formed by infusing an ounce or more of the root, powdered, in a pint of spirit of wine. This may be made to give any teint of yellow from the lightest straw to the full colour called French yellow; and will be equal in brightness even to the best dyed silks. If yellow be wanted of a warmer or redder cast, annatto, or dragon's blood, must be added to the tincture.

The best manner of using these, and the following tinctures, is to spread them even on the paper or parchment by means of a broad brush in the manner of varnishing.

Of staining paper, or parchment, crimson.

A very fine crimson stain may be given to paper, by a tincture of the Indian lake; which may be made by infusing the lake some days in spirit of wine; and then pouring off the tincture from the dregs.

Of staining paper, or parchment, green.

Paper, or parchment, may be stained green, by the solution of verdigrise in vinegar; or by the chrystals of verdigrise dissolved in water. As also by the solution of copper in aqua fortis made by adding filings of copper gradually to the aqua fortis till no ebullition ensues: or spirit of salt may be used in the place of aqua fortis.

A Declaration, or briefe Collection, of one Year's Expence for all the ordinarie Dinners and Suppers, with her Majestie (Queen ELIZABETH'S*) Breakefast, an Breakefast for the Guard, furnished with Bread, Beere, Ale,* Gascoigne *Wine, and with all Manner of Victhals of Flesh and Fish, rated accordinge the Market Prices, at highest Condition; wherein is sett downe what the Charge of one Messe of everie Diett is in one Flesh Day and one Fish Day, and so 220 Flesh, and 145 Fish Days, and then for 365 Days, being one whole Yeare.*

		L.	S.	D.		L.	S.	D.	In 365 days, beinge one yeare. L.	S.	D.	
Her Majestis diett for breakfast, dinner, and supper,	For 1 flesh day	11	7	2	For 220 flesh days	2493	16	8	3804	19	5	— The Queens Majestie.
	For 1 fish day	9	11	9	For 145 fish days	1390	9	9				
A diett of 10 and 10 dishes, dinner and supper,	For 1 flesh day	3	1	8½	For 220 flesh days	678	15	10	966	13	6½	— Lord Steward.
	For 1 fish day	1	19	8½	For 145 fish days	287	17	8½	966	13	6½	— Lord Chamberlain.
									966	13	6½	— Mr. Thresorer.
									966	13	6½	— Mr. Comptroller.
A diett of 7 and 7 dishes, dinner and supper,	For 1 flesh day	1	17	4	For 220 flesh days	410	13	4	591	6	3	Ladis in ye presens.
	For 1 fish day	1	4	11	For 145 fish days	180	12	11	591	6	3	
									591	6	3	— Lady Roxborogh.
									591	6	3	— Maids of honor.
									591	6	3	— Mr. Cofferer.
									591	6	3	— To Mrs. of houshold.
A diett of 6 and 6 dishes, dinner and supper,	For 1 flesh day	1	10	3¼	For 220 flesh days	333	4	2	491	3	11½	— 2 Clerks kitchen.
	For 1 fish day	1	1	9½	For 145 fish days	157	19	9½				
A diett of 5 and 5 dishes, dinner and supper,	For 1 flesh day	1	5	5½	For 220 flesh days	280	0	1	407	4	4½	— Gentlemen Vshers.
	For 1 fish day	0	17	6½	For 145 fish days	127	3	6½	407	4	4½	— Chaplains and Subamu.
									407	4	4½	— Presens waiters, or second of ladys.
									407	4	4½	— Phisition.
									407	4	4½	— The Robbs.
									407	4	4½	— Mr. Cooke.
A diett of 4 and 4 dishes, dinner and supper,	For 1 flesh day	0	13	6½	For 220 flesh days	148	19	2	216	0	5	— Mrs. Anslowe.
	For 1 fish day	0	9	3	For 145 fish days	67	1	3				

A diett of 3 and 3 dishes, dinner and supper,	For 1 flesh day	0	10	0	For 220 flesh days	110	0	0	—	153	10	0 — Mrs. Southwell.
	For 1 fish day	0	6	0	For 145 fish days	43	10	0		153	10	0 — Mr. Secretaris chamb.
										153	10	0 — Apoticary.
										153	10	0 — Shirurgion.
										153	10	0 — Stending wardrob.
										153	10	0 — Remouing wardrob.
										153	10	0 — Porters at gate.
										153	10	0 — Counting-howse.
										153	10	0 — Pantry.
										153	10	0 — Grome-Porter.
										153	10	0 — Eury.
										153	10	0 — Seller.
										153	10	0 — Buttry.
										153	10	0 — Scullary, Woodyeard.
										153	10	0 — Poultry, Scaldinghous.
										153	10	0 — Pastry.
										153	10	0 — Larders.
										153	10	0 — Priuy kitchen.
A diett of 2 and 2 dishes, dinner and supper,	For 1 flesh day	0	5	10	For 220 flesh days	64	3	4	—	85	18	4 — Maids of honors chamber.
	For 1 fish day	0	3	0	For 145 fish days	21	15	0		85	18	4 — Lady Walsingham's chamber.
										85	18	4 — Mrs. Speeker.
										85	18	4 — Sempster.
										85	18	4 — Tire-maker.
										85	18	4 — Confexionary, Waffrey.
										85	18	4 — Chandry.
										85	18	4 — Picher-howse, Almary.
										85	18	4 — Lander for ye body.
										85	18	4 — Lander for ye table.
A diett of 2 dishes serued once a day, dinner or supper,	For 1 flesh day	0	3	2	For 220 flesh days	34	16	8	—	45	19	2 — Howse-keeper.
	For 1 fish day	0	1	6	For 145 fish days	11	2	6				
A diett of 1 dish, serued once a-day, for breakfast,	For 1 flesh day	0	11	8	For 220 flesh days	128	6	8	—	168	7	6 — The Guarde.
	For 1 fish day	0	5	2	For 145 fish days	40	0	10				
A diett of 1 and 1 dish, at dinner and supper,	For 1 flesh day	0	4	0	For 220 flesh days	44	0	0	—	55	2	6 — Boyllinge-howse.
	For 1 fish day	0	1	0	For 145 fish days	11	2	6				

The fomme of all thes diets is 18431 l. 13s. ouer and beside facke, renish and fweet wins, butter, eges, faussery, frutry, fpicery, confexionary, lights, wood, coall, carriages, expences *extra curia*, fupplies and necessarys in ye offices, wages, bordwages, command, and waft, liueris, almes, offerings and the ftable fo much as paid by Mr. Cofferer.

MATHEMATICAL CORRESPONDENCE.

WE have received letters from Mr. Todd and Mr. Brown, by which we find they are both inclined to let the diſpute between them terminate. The former indeed ſeems to reſent the harſh expreſſions which was ſometimes made uſe of by the latter, and gives that as a reaſon why he does not chuſe to engage any farther with him.

Our ingenious correſpondent, Mr. John Clarke, of Lincoln, having endeavoured to clear Mr. Waſker of the charge brought againſt him (*vid.* p. 447.) we ſhall here give his letter verbatim, only obſerving, that Mr. Walker himſelf (in a letter dated Oct. 9,) makes uſe of the ſame apology, and declares, that he never ſaw a Palladium till the year 1756.

To Mr. OWEN.

SIR,

I Am ſorry to find you have loſt your correſpondent Mr. Walker, whom I take to be a very ingenious mathematician, when the late controverſy between Mr. Todd and Mr. Walker commenced, I cannot believe, that any gentleman would endeavour to detect any guilty of plagiariſm, and yet be guilty of it himſelf, to me ſeems abſurd. I never ſaw Mr. Walker in my life, but thoſe who have, and are acquainted with him, are very well convinced he would not (knowingly) be guilty of pyrating the works of others; and I muſt own, I think his abilities are too well known for any one to doubt it. Now, Mr. Owen, I ſhall think I am doing you a ſmall piece of ſervice, if I can ſet this diſpute in a clearer light than it ſeems to be in at preſent. It is very well known that the late Mr. Richard Rooſe, of Cheſterfield, and Mr. Walker, have frequently ſent each other queſtions by way of trial of each other's mathematical abilities; the queſtion ſent by Mr. Walker to your magazine, which Mr. Todd remarked, was one, out of ſeveral, Mr. Rooſe had ſent to Mr. Walker; now, Mr. Rooſe being deceaſed, I imagine Mr. Walker thought it could not poſſibly be very material if he ſent a queſtion of his late worthy friend's, eſpecially as he ſolemnly declares, he did not know of its being publiſhed before. Mr. Todd was certainly in the right to remark the queſtion as he did. As I believe the affair as I have repreſented it, is matter of fact, I ſhould be glad to ſee a coalition of parties and an amicable reconciliation between Mr. Todd, and Mr. Walker.

Lincoln, *Nov.* 17, 1764.

I am, dear Sir,
Your humble ſervant,
JOHN CLARKE,

MATHEMATICAL QUESTIONS, *anſwered.*

Queſt. 39. *anſwered by Mr.* T. Edwards.

BY the firſt equation x cannot be leſs than 1736, therefore the ſquare root of the third equation (omitting the remainder $56 = yz$) muſt be $= x = 1764$: now the number to be added to xy in the ſecond equation muſt be an odd one, conſequently $z = 7$, and $y = 8$; hence the book was begun on the 7th of Auguſt, 1764.

The ſame anſwered by Mr. W. Sewell, *of* Wymondham.

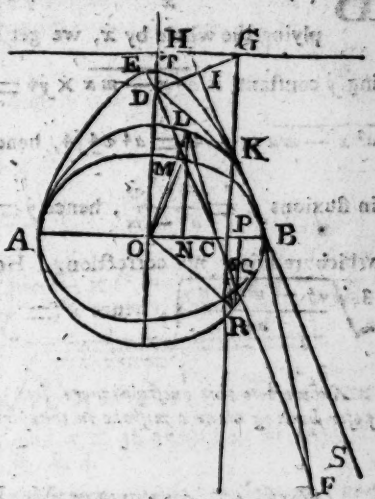
LET the three given equations be repreſented by a, b, and c, then if to the 1ſt. $\times \overline{x-z}$, be added the ſum of the 2d and 3d, we have $2xy + az = ax - 2x^2 + b + c$, but az (per the 1ſt) $= a^2 - ax - ay$, which ſubſtitute in the laſt equation, and ordered, gives $y = \frac{a^2 + 2ax - 2x^2 + b + c}{2x - a}$; again if from the 1ſt. $\times x + z$ be ſubtracted the ſum of the 2d and 3d, there will remain $2xz + b + c = ax + az$, whence $z = \frac{ax - b - c}{2x - a}$, therefore, *per* the 1ſt. $x + \frac{a^2 + 2ax - 2x^2 + b + c}{2x - a} + \frac{ax - b - c}{2x - a} = a$, ſolved $x = 1764$, $y = 8$, $z = 7$, whence the author began his book of ſcience Auguſt 7, 1764.

Meſſrs.

Messrs. Husbands, Philo-Meritas, Smith, Barker, Adams, Barber, Rotherham, Dalby, *and* Cetii, *also answered this question.*

Quest. 40. *Answered by* Sangrado, junior.

LET AEBF be the given parabola whose focus is D, directrix HG, and vertex T; and AMBQ the given ellipse whose focus is C and center O. Let DC meet the parabola in E, F, and the ellipse in M, Q. Draw DG perpendicular to DC meeting the directrix in G, draw the diameter GK meeting the parabola in K; draw IK parallel to DC; then, *per* Conics, IK touches the parabola in K and bisects DG in I. Upon the transverse AB describe the circle ALBR, through M, Q, let fall the perpendiculars LMN, RQP on the transverse meeting the circle in L, R. Join L, R, which will pass through the focus C, because CP : PR :: CN : NL being compounded of equal ratios.



Method of Calculation.

$DT = \frac{\overline{AO}^2}{4OT} = 3{,}333333$, whence $OD = OT - DT = 26{,}66666$, and $OC = \sqrt{\overline{OB}^2 - \frac{OT^2}{4}}$ = Log. 1,1215190, whence the angle ODC is found = 26° 23′, and angle OCD = 63° 37′ = angle TDG, DH = 2 DT = Log. 0,8239087, whence $DI = \frac{DG}{2}$ is found equal Log. 0,8751295, whence GK = DK is found = Log. 1,2273803, the ∠ KSD = IKG = IKD (conics) = KDS, whence KD = KS. But $\frac{\overline{EF}^2}{4} = KS \times 4KD = 4\overline{DK}^2$, whence EF = 4 DK = 67,52122 and $\frac{2}{3}$ EF × DI = the parabolic area ETF = 337,6591. NC : NL in the ratio compounded of NC to NM and NM to NL :: Log. ,0 : Log. 0,4293883, whence the angle NCL = 69° 36′, and the angle NLC = 20° 24′, and OC and CL are given, whence the angle OLC is found = 38° 18′, and the angle LOB = 72° 6′ NL = Log. 1,2794819, NM = Log. 1,545432, and CM = 15,93354, sector LOB = 251,7883; triangle $OLC = \frac{OC \times NL}{2} = 125{,}887$, whence space LCB = sector LOB — triangle OLC = 126,1013; and MCB being to LCB as NM to NL as 3 to 4 MCB is found = 94,57599 — angle OCR = 110° 24′ whence angle BOR is found = 31° 18′, and RP = Log. 1,0166315, and sector BOR = 109,3062; triangle $ORC = \frac{OC \times RP}{2} = 68{,}7259$, whence space CBR = sector BOR — triangle ORC = 40,5803, and BCQ being to CBR as PQ to PR as 3 to 4, BCQ is found = 30,43516, QP = L 0,8916928, and angle QCP = OCD = 63° 37′, whence CQ is found = 8,69885. Hence elliptic segment MBQ = MCB + BCQ = 125,01115, and MQ = MC + CQ = 24,63239.

This question was also answered by Messrs. Smith, Sewell, Adams, Barker, Barber, Rotherham, *and* Cetii *the proposer.*

Quest. 41. *Answered by Mr.* T. Adams, *of Orwell, Cambridgeshire.*

PUT 1736 = *a*, 68 = *b*, 144 = *c*, $47^2 = v$; then divide the third Equation by the second, &c. we get $4c - bx = a$, ∴ $x = \frac{a - 4c}{b} = 18$, whence $y = 8$, and the required letters are S H. *Q. E. I.*

Solutions to this question were received from Messrs. Dalby, *the proposer,* Philo-meritas, Smith, Sewell, Barker, Barber, Rotherham, Edwards, *and* Cetii.

Queſt. 42. *Anſwered by Mr.* John Barber *the Propoſer.*

BY writing $-\frac{\dot{y}\ddot{x}}{\dot{x}}$ for its equal $\ddot{y}$, we have $\overline{a^2 - mx} \times \dot{y}4 = a4\dot{x}^3\ddot{x}$, and by multiplying the whole by $\dot{x}$, we get $a^2\dot{y}4\dot{x} - m\dot{y}4\dot{x} = a4\dot{x}^3\ddot{x}$, whoſe fluent (ſuppoſing $\dot{y}$ conſtant) is $\overline{a^2x - mx} \times \dot{y}4 = \frac{a4\dot{x}4}{4}$. Again, put $v = \frac{x}{y}$, then $\dot{v}y = \dot{x}$, $\therefore \overline{a^2x - mx} \times 4\dot{y}4 = a4\dot{v}4\dot{y}4$, hence $\overline{a^2x - mx} \times 4 = a4\dot{v}4$, and $x = \frac{a4v4}{a^2 - m \times 4}$, in fluxions $\dot{x} = \frac{a4v^3\dot{v}}{a^2 - m}$, hence $\dot{y} = \left(= \frac{\dot{x}}{\dot{v}}\right)\frac{a4v^2\dot{v}}{a^2 - m}$, whoſe fluent is $y = \frac{a4v^3}{a^2 - m \times 3}$ which requires no correction. Hence, $\overline{a^2 - m} \times 3y = a4\dot{v}^3$, and therefore $v = \sqrt[3]{\frac{a^2 - m \times 3y}{a4}}$, hence $x\left(= \frac{a4v4}{a^2 - m \times 4}\right) = \frac{a4}{a^2 - m \times 4} \times \sqrt[3]{\frac{3a^2y - 3my}{a4}}^4$.

Anſwers to this queſtion were ſent by Meſſrs. Adams, Barker, *and* Brown, *but the propoſer having made a miſtake in tranſcribing his queſtion, the anſwers were different.*

Queſt. 43. *anſwered by Mr.* Edward Smith, *of Baldock in Hertfordſhire.*

BY the queſtion $y4 = -\frac{x^{14}}{a^3 + x^{\frac{3}{2}}}$, then $\frac{y\dot{x}}{\dot{y}} = \frac{8a^3x^{14} + 8x^{\frac{33}{2}}}{28a^3x^{13} + 25x^{\frac{29}{2}}} = m = 1.1428$, which equation reduced, is $x^{\frac{5}{2}} - \frac{25m}{8}x^{\frac{3}{2}} + a^3x = \frac{28ma^3}{8}$, which equation reſolved $x = 3.98852$, whence y is eaſily found. Again, by the queſtion, $y = \sqrt[\frac{1}{4}]{\frac{x^{14}}{a^3 + x^{\frac{3}{2}}}}$, then $y\dot{x} = \dot{x} \times \sqrt[\frac{1}{4}]{\frac{x^{14}}{a^3 + x^{\frac{3}{2}}}} = \frac{x^{\frac{7}{2}}\dot{x}}{a^{\frac{3}{4}}} + \frac{x^5\dot{x}}{4a^{\frac{15}{4}}} - \frac{5x^{\frac{13}{2}}\dot{x}}{32a^{\frac{27}{4}}} + \frac{15x^8\dot{x}}{128a^{\frac{39}{4}}} - \frac{375x^{\frac{19}{2}}\dot{x}}{2048a^{\frac{51}{4}}}$ +, &c. whoſe fluent is

$$\frac{2x^{\frac{9}{2}}}{9a^{\frac{3}{4}}} + \frac{x^6}{24a^{\frac{15}{4}}} - \frac{10x^{\frac{15}{2}}}{15 \times 32a^{\frac{27}{4}}} + \frac{15x^9}{9 \times 128a^{\frac{39}{4}}} - \frac{750x^{\frac{21}{2}}}{21 \times 2048a^{\frac{51}{4}}} + \text{&c. equal}$$

the area required.

This queſtion was alſo anſwered by Meſſrs. Adams, Barker, *the propoſer,* Barber, *and* Brown.

Queſt. 44. *anſwered by Mr.* G. Brown, *of Portſmouth Common, the Propoſer.*

THE tranſverſe is 66 and not 56, by a miſtake in tranſcribing the queſtion. Put $t = 33$, $c = 19$, $x =$ abſciſſa and $y =$ ſemi-ordinate of the leaſt circumſcribing ſemi-com. parabola.

Then

Then	1	$9t = \sqrt{3y^2 + 6xy + 4x^2} + \sqrt{3y^2 - 6xy + 4x^2}$
	2	$9t = \sqrt{3y^2 + 6xy + 4x^2} - \sqrt{3y^2 - 6xy + 4x^2}$ *
1 + 2 and ÷ 4	3	$\frac{9}{2} \times \overline{t^2 + c^2} = \sqrt{3y^2 + 6xy + 4x^2}$
1 − 2 and ÷ 2	4	$\frac{9}{2} \times \overline{t^2 - c^2} = \sqrt{3y^2 - 6xy + 4x^2}$
3 ⊙ 2	5	$\frac{81}{4} \times \overline{t^2 + c^2}^2 = 3y^2 + 6xy + 4x^2$
4 ⊙ 2	6	$\frac{81}{4} \times \overline{t^2 - c^2}^2 = 3y^2 - 6xy + 4x^2$
5 − 6	7	$81tc = 12xy$, $\therefore x = \frac{27tc}{4y}$
5 + 6	8	$\frac{81}{2} \times \overline{t^2 + c^2} = 6y^2 + 8x^2$, then $\frac{81}{2} \times \overline{t^2 + c^2} = 6y^2 + \frac{729t^2c^2}{2y^2}$ by substitution
8 ordered	9	$y = \sqrt{\frac{27}{8} \times \overline{t^2 + c^2} \pm \sqrt{\frac{27}{8} \times \overline{t^2 + c^2}^2 - \frac{243t^2c^2}{4}}} =$ 71.770802 or 68.091496, and $x =$ 58.968966 or 62.155338, the dimensions required. *Q. E. I.*

Note, It may not be improper to find the limit of the given ellipsis, make $c = 1$ and $\frac{27}{8} \times \overline{t^2 + 1}^2 = \frac{243t^2}{4}$, $\therefore t = \sqrt{3}$, *i. e.* the Conjugate : transverse :: 1 : $\sqrt{3}$ = 1.7320508, the limit required.

* Vide my solution at p. 447, Mag. for September.

*** *We forgot to mention in the proper place, that Mr.* John Barber *solved the* 37*th Question.*

New QUESTIONS *to be answered.*

Quest. 51. *By Mr.* Thomas Hague, *of* Chippingnorton, Oxon.

IN an elliptical field whose transverse and conjugate diameters are in proportion as 5 to 3, the shillings that would circumscribe it (supposing a shilling an inch in diameter) will purchase the land at the rate of 30*l.* an acre, the price and area of the field are required?

Quest. 52. *By Mr.* John Hyde.

NEAR me resides a blooming lass,
Possess'd of every charm and grace;
By nature form'd with partial care,
That she with Venus may compare;
Her mental beauties brightly shine,
And all the nymph appears divine.
The pride of all the fair is she—
By all admir'd—ador'd by me.
Her age and fortune if you'd know,
Resolve th' equations form'd below.

viz. $\frac{xy}{\sqrt{x}} + \sqrt{5y} = 12.5\sqrt{x} + 4y$

$xy^2 + yx^2 = 4128000$, where x represents the young lady's age, and y her fortune.

Quest. 53. *By Mr.* G. Getil, *of* Greenwich.

THE diameters of two circles which touch inwardly are 25 and 60. Required the dimensions and area of the greatest rectangular figure that can be inscribed between their peripheries.

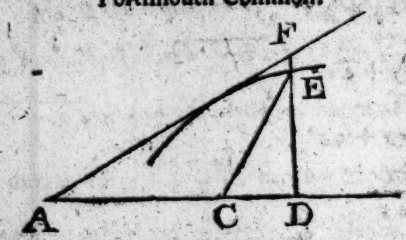
Quest. 54. *By Mr.* Peter Bernardin, *of* Greenwich.

GIVEN the hypothenuse of a right angled triangle = 470, and the line bisecting

biſecting the vertical angle = 39° ; to find the ſides of the triangle.

N. B. A geometrial conſtruction will be moſt agreeable.

Queſt. 55. *By Mr.* George Brown, *of* Portſmouth Common.



LET there be any given angle as D A F, and let there be an infinite number of perpendiculars to A D, as D F, &c. and let each perpendicular D F be ſet off from a fixed point as C, to cut D F in E, viz. C E = D F. Required to find the curve paſſing through thoſe points?

Queſt. 56. *By Mr.* David Waugh, *of* Portſmouth.

GIVEN the fluxionary equation $\frac{\dot{x}^2}{y^2} = a + x$; required the value of y, without the help of infinite ſeries.

Apparent Times of the Eclipſes of Jupiter's *Satellites, which will happen in* December, 1764, *computed, from New Tables, to the Meridian of the* ROYAL OBSERVATORY *at* GREENWICH ; *where thoſe marked * are viſible*

I. Satellite. Immerſions.				II. Satell. Imm.				III. Satellite.			
D.	H.	M.	S.	D.	H.	M.	S.	D.	H.	M.	S.
1	20	31	47	19	13 *	8	6	1	10 *	54	55	6	1	39	10 I.
3	14 *	58	33	21	7 *	35	34	5	0	11	15	13	5	42	37 I.
5	9 *	27	7	23	2	3	12	8	13 *	27	31	20	9 *	30	1 I.
7	3	54	48	24	20	30	48	12	2	43	45	27	13 *	25	32 I.
8	22	22	31	26	14 *	58	25	15	16 *	0	0	IV. Satellite.			
10	16 *	50	7	29	9 *	26	14	19	5	16	30	15	2	31	2 I.
12	11 *	17	39	30	3	53	43	22	18 *	33	28	16	3	13	0 E.
14	5	45	14	31	1	31	21	26	7 *	49	48				
16	0	13	52					29	21	10	35				
17	18	40	30												

On the 12th, a little after 9 the *Moon* will eclipſe ♈ in *Cancer*.
On the 13th, *Venus* will be near ♌ in *Libra*.
On the 22d, *Venus* will be near ♎ in *Libra*.
On the 31ſt *Mars* will be near ♒ in *Aquarius*.

To the Proprietors of the General Magazine.

Gentlemen,

SEEING how impartially you examined Mr. Simpſon's works in your laſt magazine, makes me (who is one learning the mathematicks) form a ſtronger opinion than I uſually had, that there can be no better works on the ſubject.

The reaſon of my ſending this is a doubt ariſing whether Mr. Emerſon's works has any advantage, becauſe I ſaw lately a periodical work that enforces the ſtudy of them before any now extant.

The favour I intreat (which ſhall always be acknowledged) is to give your judgment in this caſe; and, to inſert the firſt opportunity in your Magazine, your opinions of the ſame, where it will be of ſervice to numbers of other young people who are in like doubts as well as to me.

I ſhall wait with impatience, becauſe I want to begin algebra, where your opinion ſhall be deciſive.

In doing which you'll much facilitate the learning of gentlemen, Yours

T. P.

Th[e]

This correſpondent's requeſt appears to be a very unreaſonable one, our buſineſs is by no means to draw compariſons between living or dead authors, or to give the preference to ones writings before another's: but to give juſt memoirs of the worthy and illuſtrious dead, in the mathematical and philoſophical way.

** *Mr.* Bamfield *we hope will excuſe our continuing a Controverſy which muſt be too tedious for our Plan.*

POETRY.

A new Paradox. *Addreſſed to Mr.* Thomas Ford.

THere's an Iſland, dear Ford, where my friend he does dwell,
The inhabitants too the ſame truth do reveal,
That th' body of the ſun does viſibly appear,
In the morning to all before it riſes there;
In the evening too, after its ſet may be ſeen,
Pray, explain me the ſame in next month's Magazine.

Stow, Nov. 9, 1764. *Miſs* Polly Stow.

A new Rebus. *By Miſs* Polly Stow.

THE name of a monarch in hiſtory well known,
Which once ruled England, and bore England's crown;
Th' motion of an arrow ſprung from a bow,
When rightly connected names a man I would know.
I apply to Walker— to Sadler—and Clark,
For he's known by all three—tho' conceal'd in the dark.

Miſtreſs Martha indites, and miſs Polly ſets down,
An anſwer to Thomas, of her marriage in town.

"*Aſk advice but take your own.*" (*See page* 454.)

FRiend Thomas, altho' that I'm your miſtreſs's maid,
And Richard has told me ev'ry thing you have ſaid;
I value you not,—for I'm Dicky's own bride,
And hope to ſee Tommy to a whipping-poſt ty'd
For abuſing of Patty—and calling her w——re
For I tell you, my friend, as I told you before,
That a c—ld, a drunkard, a f——l, and a k——ve,
The ſtocks, and the whipping-poſt, they always do crave.

Her
Patty ☼ Freelove,
Mark

THYRSIS *and* PHILOMEL.

THYRSIS.

PHILOMEL, thus nightly charming
Every ſacred grove and ſtream,
And the feath'ry tribe alarming,
Why is abſence all thy theme!

Cou'd I too appeaſe my anguiſh,
Soaring on thy pinions rove,
I that here deſpair and languiſh
Soon would reach my diſtant love.

Cupid, god of warm deſires,
Binds us each in amorous chains;
How unequal yet our fires!
Thine are pleaſures, mine are pains.

Thou, fond warbler, ever waking
To ſome heart-reviving joy;
I the bittereſt cup partaking,
Dead deſpair while *Daphne*'s coy!

PHILOMEL.

Ceaſe thee *Thyrſis* from repining,
Happy hours ſhall ſoon return;
Conqueſt thee the god deſigning,
Daphne fierce as thee ſhall burn.

The kind deity relenting,
Take's the faithful lovers part;
To thy ret'hric ſhe aſſenting,
Quick's the paſſage to her heart.

A reduced Officer's *complaint.*

CUrſe on the ſtar, dear Harry, that betray'd
My choice, from law, divinity, and trade,
To turn a rambling brother of the blade.
Of all profeſſions, ſure, the worſt is war;
How whimſical our fortunes, how bizarre!
This week we ſhine in ſcarlet and in geld,
The next, the ſword is pawn'd, the watch is ſold;
This day, familiar with my lord, we dine,
The next his grooms our company decline.
Like meteors, rais'd in a tempeſtuous ſky,
A while we glitter, then obſcurely die.

Of

Of ſuch diſgrace muſt heroes ſtill complain,
And curſe an honourable peace in vain?
I, who ſo lately paſs'd my ſmiling hours,
In witty converſe, and in ſoft amours;
Who in rich volwey, and champaign cou'd toaſt
The reigning beauty, and her favours boaſt,
Muſt now retire, and languiſh out my days,
Far from the realms of pleaſure, and of praiſe;
Quit dear Hyde Park, for dull provincial air,
And change the play-houſe for a country fair;
With ſneaking parſons beaſtly bumpers quaff,
At low conceits, and vile conundrums laugh;
Toaſt to the church, and that and this divine,
And herd with country ſquires, a ſwine with ſwine.

Ye gods, ſuch foul diſgrace muſt heroes bear?
Is this of honourable peace their ſhare!
There was a time, oh! yes, there was a time,
Ere poverty made luxury a crime;
Ere broths, with marygolds beſtrew'd, were known;
When ſoups made way for dainties not our own.
When French ragouts were orthodox and good,
And truffles held no hereſy in food.
Not to eat mackrill was adjudg'd high treaſon,
Tho' gooſberry ſauce, as yet, was not in ſeaſon.
But under———frugal diſpenſation,
Theſe ſplendid ſins ſummit to reformation.
Scourg'd by his wand, and humbled by his ſway,
I've learn'd to ſuit my diet to my pay.
And, now, even ſanctity with ſolemn face,
A heavy dumpling with a formal grace.
In aukward plenty ſlovenly I dine,
And nappy ale ſupplies the want of wine.
No nice deſarts my tutor'd palate pleaſe,
To fill up chinks, a ſlice of Suffolk cheeſe.

Muſt Britiſh heroes thus like Roman live?
And is this all a glorious peace can give?
But, ah! the hardeſt part is ſtill behind,
The fair, too, gentle Harry, prove unkind,
Think then how wretchedly my time muſt paſs,
For what's this world, my friend, without a laſs?
Tho' pinch'd by poverty, inglorious ſtate!
Give me but woman, I'll abſolve my fate.
But, ah! to thoſe by poverty depreſt,
Not fate itſelf can give a female gueſt.
The ſex, no vows of needy love will truſt,
To pamper pride they'll even ſtarve their luſt,
And vain of titles, equipage and ſhow,
Quit the rough ſoldier for the tainted beau.
I, who ſo oft my forward zeal have ſhew'd,
And in their ſervice ſpent my warmeſt blood,
Am now reduc'd (hard fate!) for want of pelf,
To keep the worſt of company—myſelf.

Are heroes baniſh'd, by the peace they won,
To dwell with thoſe whom all combine to ſhun?

Lines ſtuck on the Temple-Gates.

AS by the Templar's holds you go,
The *horſe* and *lamb*, diſplay'd
In emblematic figures ſhew
The merits of their trade.

That clients may infer from thence
How juſt is their profeſſion,
The *lamb* ſets forth their *innocence*,
The *horſe* their *expedition*.

O happy *Britons!* happy iſle!
Let foreign nations ſay,
Where you get juſtice without guile,
And law without delay.

An epitaph upon the political memory of W——
P——, *E*—— *of* B——, *who died to ſave on* July 15, 1742;

P———y, no friend to truth! in fraud ſincere,
In act unfaithful, and from honour clear;
Who broke his promiſe, ſerv'd his private ends;
Who gain'd a title, and who loſt all friends:
Diſhonour'd by himſelf, by none approv'd;
Curs'd, ſcorn'd, and hated ev'n by thoſe he lov'd.

The Fox *and* Hounds. *A Fable.*

A Wily fox, who long had been
The plund'rer of the neighb'ring plain,
When chac'd ſo hard, he could not fix
On any ſtratagems or tricks;
Could no more double as he fled,
Truſted, inſtead of *heels*, his *head*;
With deſperate courage he turn'd round,
And thus addreſs'd each gaping hound.
" Stop, ſtop, ye noiſy ſimple pack;
" Hear me a Word:—What do you lack:
" By killing me what do you win?
" A ſtinking hide and tatter'd ſkin:
" Some noiſy fools halloo you on,
" Not for your profit, but their fun:
" Now, ſirs, conſider what I offer;
" It is no mean nor fooliſh proffer.
" Here you have run and ſtand a-gape
" For nothing:—Now let me eſcape,
" And to your kennel I will bring
" Preſents as great as from a *king*.

"I am not game —let me succeed
"And I will give you game indeed."
The hounds all liften; then their leader,
This answer'd the old crafty pleader;
'Sir Reynard, what you've said is true;
You shall escape, but we'll pursue:
The art's to make our masters think
You have 'scap'd fair, though on death's brink;
Hark! hark the horn!—They're coming on,
Down, down to yonder thicket run:
Half dead, and panting, we'll pursue,
But there we'll lose both scent and view:
Leap the park-wall! we can't get over;
And *burrow safe* in *royal cover*.'
Away runs *Reynard*, leaps the wall,
And the chace ends in—*Nought at all*.

MORAL.

If *men* may be with *hounds* compar'd;
If any knave like *Reynard* far'd;
If any *masters* have been cheated,
And know the *pack* their game defeated;
What should a *true bred huntsman* do?
Why, what? but—*hang up all the crew*.

CHURCHILL is dead, but still survives his fame,
Engrav'd on freedom's list is Churchill's name;
There fix'd secure in vain his foes unite,
And strain the Muse to shew the world the spite;
Those conjurers who dare presume to tell,
That Churchill for his faults is doom'd to H—ll.
Cease to abuse, ye well paid bards, the man,
Who living stood the friend of freedom's plan;
Who nobly dar'd with virtue's foes engage,
And lash the vices of this venal age,
In wealth or want the poet was the same,
Nor bribes nor pow'rful wrath could damp his flame;
He had his faults, what man can say I've none,
And guiltless at the guilty cast a stone?*
Blush! blush! ye sycophants! repent and mend,
And join to mourn the loss of Freedom's friend:
Like him refuse to prostitute your pen,
To serve the purposes of vicious men;
For tho' your crimes are to the world unknown;
The fate you judge is his, may be your own.

ACADEMICUS.

* *Alluding to Scripture.*

A List of New Books and Pamphlets.

1. A seasonable alarm to the city of London. By Zachary Zeal. 1s. 6d. *Nicoll.*

2. The present state of navigation on the Thames, considered. By a commissioner. 1s. *Rivington.*

3. Poems on several occasions. By the rev. Samuel Rogers, rector of Chillington, Bedfordshire. Vol. 1. 5s. *Dodsley.*

4. Arminius: or Germania freed. Translated from the German of the Baron Crozech. 2 vols. 12mo. 6s. bound. *Becket.*

5. The merry philosopher, or thoughts on jesting. Translated from the German of George Frederick Meier. 12mo. 3s. bound. *Newberry.*

6. The laws of gaming. Boards, marble paper, 3s. 6. *Owen.*

7. An introduction to the knowledge of the laws and constitutions of England. 2s. 6d. sewed. *Worrall.*

8. A letter to the right honourable Charles Townshend. 1s. *Nicoll.*

9. The palladium of Fame. 2s. *Davenhill.*

10. The triumph of genius. A dream. 1s. *Jones.*

11. A new grammar to teach the French language. By V. J. Peyton. 3s. *Dodsley.*

12. The Hebrew text considered. By Norman Sievright, A. M. 2s. 6d. sewed. *Millar.*

13. The history of religion. By an impartial hand. In 4 vols. 8vo. 1l. 4s. bound. *Henderson.*

14. Remarks of Dr. William Redmond's principle and constituence of antimony. By a Chemist. 1s. *Fletcher and Co.*

15. Dissertation on the structure of the human mind. By Dr. Colignon. 1s. 6d. *Dodsley.*

An Account *of the* CAPRICIOUS LOVERS, *a* Comic Opera, *as performed at the* Theatre Royal *in* Drury Lane. *By Mr.* Robert Lloyd. *The* Music *compoſed by Mr.* Rush.

IN the advertiſement to the reader, we are told, that the *Caprices d' Amour ou Ninette a la Cour*, written by Mr. Favart, is the ground-work of this little piece; and that the author was much pleaſed with the life and ſimplicity the French writer had thrown into his performance, without deſcending to that ſpecies of humour, which the Engliſh have very little reliſh of, groſs Italian Buffoonry. This, Mr. Lloyd ſays, he has chiefly endeavoured to preſerve in the Engliſh opera.

The *Characters* are,

Aſtolpho, a prince, in love with Phœbe,	*Mr. Packer.*
Fabian, his friend,	*Mr. Didier.*
Hobbinol, Father to Colin,	*Mr. Yates.*
Damon, Father to Phœbe,	*Mr. Baddeley.*
Colin, betrothed to Phœbe,	*Mr. Vernon.*

WOMEN.

Phœbe, a country girl,	*Miſs Slack.*
Emily, a princeſs, in love with Aſtolpho.	*Mrs. Scot.*
Liſetta, a lady, ſet on to allure Phœbe to court,	*Mrs. Clive.*
Clara, a court lady,	*Miſs Wright.*

TIME will not at preſent permit us to enter into a particular detail of this opera; we ſhall only preſent our readers with the following extract from a ſcene, where Phœbe is repreſented, dreſt à la-mode, at court.

Clara. All the world will feel the force of your charms.

Phœbe. Charms! are theſe your charms? I hardly know myſelf, and yet after all, a peacock, a jay, or a butterfly is dreſt ten times finer; here are gold and ſilver, and jewels, and ribbands of all the colours in the rainbow.—A great hoop that hides my real figure, waſhes that take away my natural complexion, ſhoes that will cripple me, and ſtays that will make me crooked, I wiſh I was in my own cloaths again.

When late a ſimple ruſtic laſs,
I rov'd without conſtraint,
A ſtream was all my looking-glaſs,
And health my only paint.

The charms I boaſt, (alas how few!)
I gave to nature's care,
As vice ne'er ſpoilt their native hue,
They could not want repair.

Liſetta. Your ladyſhip will excuſe me, but upon my word, your notions are quite antiquated, have not the leaſt reliſh of the *Bon Ton*.

Phœbe. *Bon Ton*! what's that!

Liſetta. Every thing in the world, ma'am, in the polite world at leaſt. It is impoſſible to look, or walk, or talk without it, ma'am.

Phœbe. What will you perſuade me out of my ſenſes! D'ye think to make me believe that I have not the uſe of my eyes, my tongue, or my feet? Don't I ſpeak plainly? Don't you underſtand me? Don't you call this *ſpeaking*?

Liſetta. Not quite according to the *Bon Ton*, madam: there is no occaſion for your ſpeaking plainly, it is the worſt thing you can do, nor for my underſtanding you: nay indeed, that's ſtill worſe than t'other, you ſhould never ſpeak to be underſtood. As to your manner, d r-a-w l out your words in a faint weak voice, as if you did not know how to get them off your tongue. Your ladyſhip, *entre nous*, ſpeaks too much in the country tone. You ſeem all health and ſpirits. Put a little ſickly delicacy into your accents, languiſh with your eyes, and totter in your gait, and then you'll be quite in the *Bon Ton*, ma'am.

Phœbe. How ſtrange and ridiculous! ſurely this place is the region of abſurdities.

How ſtrange the mode which truth neglects,
And reſts all beauty in defects!
But we by homely nature taught,
Tho' rude in ſpeech, are plain in thought.

Liſetta. Why there again! in your ſinging now! Your ladyſhip has a fine pipe, but not a note according to the *bon ton*. No Italian expreſſion, which is the life and ſoul of all muſic, the very eſſence of harmony; your fingers of taſte will run up and down the ladder of ſounds from the cellar up to the garret, now rumbling along in the grand *Spirituoſo* till they make your ears crack again, and then in the *Piano* they expire like a ſwan to their own melody. In our favourite compoſitions we are not contented with making the ſound an echo to the ſenſe, but by a happy jumbling of both together, create the moſt agreeable confuſion of harmony in the univerſe. Pleaſe your ladyſhip, I'll give you a ſpecimen.

Tho' thunder in thy accents roll,
No fear ſhall ſhake my daring ſoul,
O, tyrant, grumble, rant and rave,
My ſpirit ſcorns to be thy ſlave.

But

But pity lends her ſoothing aid,
Can I forſake my tender maid?
O, tyrant, vain is thy decree,
Her mournful looks are death to me.

There, ma'am, that's your true taſte.

Phœbe. It's very fine, but I don't like it. This taſte, as you call it, ſeems to have declared war againſt nature, and turned all her works topſy-turvy. Pray ſhall I meet with all theſe fopperies at court?

Liſetta. Court, madam, abounds with curioſities; there you will meet a thouſand objects to entertain you. There are your pretty little creatures with high heels to their ſhoes, and ſolitaires round their necks, that look ſo lady-like, you would think they were women with ſwords by their ſides: Then there are your preciſe puppets trotting along with formal bands under their chins, and plaiſtered wigs upon their heads, whiſpering ſtrange nothings in your ear, and exhibiting at one view the moſt whimſical combination of pride and ſervility.

Phœbe. Come then! I long to be there, let's to court.

Clara. A fan, a fan for her ladyſhip.

Phœbe. Dear me! what uſe can I make of this.

Liſetta. This is a wonderful inſtrument: It's exerciſe is various and elegant. You ſhall hear it, madam; and then, if you pleaſe, I'll attend you to court.

[The piece was received by a numerous and polite audience with univerſal applauſe and approbation; and the performers reſpectively did great juſtice to the author and compoſer.]

A CHRONOLOGICAL MEMOIR *of* Occurrences,

For NOVEMBER, 1764.

FOREIGN AFFAIRS.

RUSSIA.

PRivate Letters from Peterſburgh inform us, that her Imperial Majeſty has given orders for tranſlating the Swediſh, Daniſh, and Pruſſian laws into the Ruſſian tongue, and for digeſting the Ukaſes, which may be conſidered as the ſtatute law of Ruſſia, under the ſeveral heads, ſo that on the whole, a new Code may be compiled for the benefit of her ſubjects.

They write from Peterſburgh, of the 5th ult. that the young lady Woronzow, who was the favourite of the late Emperor of Ruſſia, has obtained leave from the Empreſs to return from her baniſhment, and to reſide on her father's eſtate.

Extract of a letter from Peterſburgh.

The court and ſenate have taken all poſſible pains to ſhew that the Lieutenant Mirowitſch was not ſuch an inſtrument as ſome apprehended him to be. For this purpoſe the ſentence which was pronounced againſt him the 26th, and executed the 26th of Sept. laſt, has been publiſhed, with ſome pieces annexed, giving a circumſtantial account of the traitor, his crimes, thoſe of his family, and the deſigns he propoſed to execute by the deſperate attempt that coſt him his life, as alſo the methods that he employed to ſeduce thoſe that were his accomplices. We alſo learn in this trial, that his principal aſſociate Apollo Uſchakow, who had bound himſelf by an oath, taken at the great altar, in the church of Caſan, to aſſiſt him in ſetting Prince Iwan on the throne, was drowned on the road to Smolenſko, the 10th of June laſt. The following paragraph, among others in this piece, is worthy of attention: "As the violent death of the unfortunate Prince Iwan was the immediate conſequence of the deſperate attempt of Mirowitſch, ſo muſt this officer be manifeſtly conſidered as the principal cauſe of this aſſaſſination, nay even regarded as the murderer of that unhappy Prince." This piece of caſuiſtry, which it deſigned as a ſoporifick for the conſciences of the governor of Slufſelberg and of thoſe that directed his hand to ſtrike the fatal blow, is not looked upon here as either clear or ſatisfactory.

NETHERLANDS. Letters from Amſterdam adviſe, that great quantities of artillery, warlike ammunition and ſtores, are now buying up in that city, and divers parts of Holland, on account of the king of Pruſſia.

POLAND. *Warſaw, Oct.* 6. The Prince primate having notified by letter, to the king of Pruſſia, the election and acceſſion of count Staniſlaus Auguſtus Poniatowſki to the throne of Poland, that prelate has received from his Pruſſian Majeſty the following anſwer:

"Couſin,

"Your letter of the 7th of laſt month, by which you acquaint me with the unanimous election of his excellency count Poniatowſki,

atowſki, Stolniſk of Lithuania, to the throne of Poland, has given me unſpeakable ſatisfaction. 'Tis an event in which I intereſt myſelf the more, as it exactly compleats my wiſhes, at the ſame time that it anſwers the moſt eſſential intereſts of the republic, which I had only in view, when I propoſed and recommended for king, him who is now the actual ſovereign. Thoroughly ſenſible of your confidence, and the regard you have ſhewn for my recommendation, I felicitate your highneſs and the whole republic, on a choice, which, not only in itſelf, but by the manner in which it was made, ought to draw on the Poliſh nation an eclat of glory, an immortal reputation, and proſperities inſeperable from a happy government; which, for my part, I wiſh you with as much ſincerity as ardour. As to the reſt, I pray God to take you into his holy and worthy keeping. Your affectionate couſin

(ſigned) FREDERICK.

Berlin, Sept. 14, 1764.

Warſaw, Oct. 8. Every thing is very quiet here. Thoſe who oppoſed the dyet of convocation have all retracted, and acknowledged the king for their lawful ſovereign.

Letters from Warſaw of the 6th inſtant, adviſe, that the king of Poland, whoſe whole ſtudy appears to be the welfare and happineſs of his ſubjects, is indefatigable in deviſing meaſures for the well-governing the kingdom, and for making ſome ſalutary amendments in the preſent ſyſtem of government, which he deſigns to make publick at his coronation. Several councils have been held at the Prince Primate's to aſſiſt his majeſty's laudable endeavours.

GERMANY. *Brunſwick, Oct.* 19. His ſerene highneſs our hereditary prince, who ſtayed ſome time with his uncle the king of Pruſſia, in Sileſia, and afterwards at Potzdam, returned here the 15th inſtant, in perfect health. Her royal highneſs his conſort advances happily in her pregnancy.

Letters from Cologne, of the 19th ult. adviſe, that the late exceſſive rains had ſo ſwelled the rivers, that, in the night of the 14th, the ſtone bridge in that neighbourhood had been waſhed away, and other very conſiderable damage done all over the country.

Cleves, Oct. 23. Dr. Schutte in a Diſſertation which he has publiſhed on the rain of a reddiſh colour, which lately fell here, has given it as his opinion, that it was cauſed by particles which had been raiſed into the atmoſphere by a ſtrong wind, and that it was no way hurtful to mankind or beaſts. The doctor made nine experiments.

Ratiſbon, Nov. 1. The Imperial and Pruſſian ſoldiers who are beating up here for recruits, came to blows a few days ago, and cut one another pretty handſomely. This affair will probably have very great conſequences.

Letters from Vienna bring advice, that they had received an account from Conſtantinople, that the Khan of Tartary was depoſed.

They write from Vienna, that the unhappy city of Commora, which was almoſt demoliſhed laſt year by an earthquake, had been viſited again the latter end of laſt month by ſeveral more ſhocks, which had put the inhabitants into the greateſt conſternation.

The king of Pruſſia has iſſued a decree, ordering the lords of the manors of his province of Sileſia to treat their vaſſals or tenants with more indulgence and humanity than has been their cuſtom hitherto, and no longer to deliver them into the hands of the military for chaſtiſement; his Majeſty herein ſignifying his royal pleaſure, that the military ſhall not be confounded by the civil juriſdiction, that each ſhall remain within its proper bounds, and that when a lord thinks himſelf injured by a farmer, he ſhall ſummon him before a competent judge, and follow the rules of common juſtice.

Letters from Berlin ſay, that his Pruſſian majeſty is very intent on recovering the ſubjects he loſt from ſeveral parts of his dominions, through the hardſhips brought upon them by the late war; and for that purpoſe has propoſed very advantageous terms, and a conſiderable diminution of taxes, to ſuch as will return and cultivate their former poſſeſſions.

FRANCE. They write from Paris, that the Sieur Soltikoff, a gentleman of Ruſſia, coming from Spain, had occaſion to raiſe 30,000 livres on a parcel of jewels, and applied to one Morange a Jew, who agreed to advance the ſum required, and at the ſame time paid down 3000 livres: but the gentleman incautiouſly truſting him with the jewels on his promiſe of bringing him the remaining 27,000 livres the next day, Morange went directly to a jeweller, ſold them, and went off with the money.

They write from Paris, of the 5th inſt. that a midwife in that city, had lately laid a woman of a monſtrous birth; it was a male child, ſtill born; it had one head, two faces parted aſunder by a ſmall partition of ſkin, four eyes, two noſes, and two mouths; the two external noſes of a beautiful make, but the two internal were united into one, and joined the apple of the eye. The noſes were flattiſh; one of the mouths was perfect, but the other had an hare-lip, opened only on the right ſide: the remaining part of the body was properly ſhaped, except the

the back-bone, which ſeemed not to have the natural make. It had two paſſages backwards, one above the other. It was rough, covered over like an hare-ſkin, and its forehead was dented in.

We hear from Calais, a fire broke out lately in the Silver-Lion inn there; by which in a ſhort ſpace of time the whole houſe, with moſt of its coſtly furniture was reduced to aſhes. The damage is computed at 90,000 livres (about 4000 l. ſterling.)

Letters from France mention the departure of John Wilkes, Eſq; for Berlin.

SPAIN. *Segovia, Oct.* 15. The regiment of Soria, in garriſon at Barcelona, together with the two regiments of Catalan Fuzileers, (or Miquelets) have received orders to march to the frontiers of Portugal. Laſt Saturday his Catholick Majeſty, attended by the Prince of Auſtrias, the infant Don Lewis, and the young Princes came hither to ſee the military ſchool eſtabliſhed by count Gazola, maſter of the ordinance, who had fortified a camp, with different redoubts, for the inſtruction of the Prince of Auſtrias, as well as for the Cadets; and the attack of the lines was made in all its forms by the volunteers of Arragon, and defended by the two battalions of the regiment of artillery. His Catholick Majeſty expreſſed great ſatisfaction at the performance. *Lond. Gaz.*

There has been lately at Segovia the moſt violent and tremendous ſtorm of thunder and lightening that had been ever known in thoſe parts; inſomuch that the inhabitants apprehended the diſſolution of all things was at hand, but providentially there was no great miſchief done, except to one church, wherein an image of the Holy Virgin was very much defaced.

PORTUGAL. *Liſbon, September* 25. We had a violent hurricane here the 21ſt, which continued upwards of 24 hours. The lightning fell in different parts of the city, and killed two men in the village of Barcelona.

ITALY. *Venice, Oct.* 19. The plague having again made its appearance in the territory of Knin in Dalmatia, on the confines of Boſnia, the republick have again increaſed the quarantine on all that coaſt to 42 days, from 26, to which it had been reduced. *Lond. Gaz.*

By letters from Geneva of the 20th ult. we learn, that the profits of the edition of the great Corneille's *Theatre*, with M. de Voltaire's comments, which has lately made its appearance there, are deſigned to procure for Mademoiſelle Corneille, the niece of the French Sophocles, a maintenance worthy of the great name ſhe bears. The French King has ſubſcribed for 200 copies, and makes a preſent of 150 to the above lady. The empreſs of Ruſſia has extended her generoſity in the ſame manner. M. de Voltaire has ſubſcribed for 200 copies, and numbers of all ranks have followed his example.

Turin, November 10. The Malecontents of Corſica finding their progreſs in the attack of St. Fiorenzo did not promiſe them a ſpeedy ſucceſs, raiſed the ſiege of that place laſt week, and have retired to the interior parts of the country. *Lond. Gaz.*

Extract of a letter from Legborn.

"The following Corſican manifeſto, ſaid to have been ſworn to by Paoli and his adherents, in the year 1754, and lately renewed by them, on account of the deſigned embarkation of French troops for the aſſiſtance of Genoa, is now handed about here.

'We have ſworn, and we call upon God to witneſs it, that we will all of us ſooner die than enter into any negociation with the republic of Genoa, or return under its yoke. If the powers of Europe, and the French in particular, withdrawing their compaſſion from an unhappy people, ſhould arm themſelves againſt us, and concur in our total deſtruction, we will repel force by force; we will fight like deſperate men, determined either to conquer or die, till our ſtrength and ſpirits being quite exhauſted, our arms fall out of our hands; and when we have no ſtrength to take them up again, when all the reſources of our courage ſhall be exhauſted, our deſpair ſhall furniſh us with the laſt, which ſhall be to imitate the famous example of the Saguntines, by ruſhing voluntarily into the fire, rather than ſubmit ourſelves, and our poſterity, to the inſupportable yoke of Genoeſe tyranny and ſlavery.

Turin, Oct. 27. The French troops deſtined for Corſica, are now quite ready at Toulon, expecting every day final orders to embark: and the 18th inſtant, a Genoeſe galley, with five large barks, ſailed from Genoa for Baſtia, to bring back the troops of the republick, as ſoon as the French ſhall have taken poſſeſſion of thoſe places which they are to garriſon. *Lond. Gaz.*

AMERICA.

AMERICA.

THEY write from New-York, that an accurate ſurvey of the gulph and river of St. Lawrence, and ſhores of Labrador, has been delineated, from obſervations taken on board the Carſon government ſhip ſent out for that purpoſe, which will be of the greateſt advantage to the future navigation of thoſe ſeas, as many dangerous places have been diſcovered, which were before unknown, or induſtriouſly concealed, while the French were in poſſeſſion of Canada.

The Suffolk packet, Ball, from South-Carolina, has brought the following advice.

From the South-Carolina Gazette.

Meſſage from the Commons Houſe of Aſſembly to the Lieutenant Governor.

May it pleaſe your Honour,

IN anſwer to your meſſage of yeſterday, accompanied with a letter from his excellency general Gage, we inform your honour, that this houſe referred the ſame to a committe, who made a report thereupon, which we have agreed to; and we herewith ſend your honour a copy of the ſame.

By order of the houſe,

RAWLINS LOWNDES, *Speaker.*

25th Aug. 1764.

The committee on the governor's meſſage of yeſterday, accompanied with a letter from his excellency general Gage of the 22d of laſt month, recommending proviſion to be made for the Cherokee and Chicaſah Indians, in order to prevail on them to intercept a convoy of ſupplies from the French, to the Shawaneſe, Delewares, and the Indians of d'Etroit, and to aſſiſt his majeſty's troops going up the Miſſiſippi.

REPORT,

THAT they have conſidered the ſaid meſſage and letter, and are of opinion, that the rejection of the tax bill, by the council (which the houſe is informed of by meſſage) muſt give ſuch a ſhock to publick credit, as either to cauſe an entire ſtagnation, or elſe to put it on the moſt diſadvantageous and ſcandalous footing: becauſe the ſuppliers of the publick muſt thence clearly perceive, that their hopes of payment do not ſo much depend on the faith and honour of their natural repreſentatives, as upon the caprice and pleaſure of the council, and very often even of a majority of ſuch as are altogether placemen, and have no natural tie or connexion whatever with the province.

For theſe reaſons, your committee cannot recommend to the houſe to enter into any expence till publick credit be replaced on its proper baſis, and the old and heavy debt already incurred be fully diſcharged, by the paſſing of a tax-bill: in order too, that the creditors of the province may find, while its repreſentatives are unconſtitutionally prevented from paying their juſt demands, that they will not countenance any farther augmentation of the publick debt, leſt they ſhould thereby ſeem tamely to ſuffer themſelves to be made uſe of, only as inſtruments, to entrap and defraud the people.

Accounts brought from America, by the Juno frigate, ſay, that 100 of our forces were loſt in boats, going on a command up a river there; that lieut. Davis, and Mr. James Cavalier, who acted as ſerjeant Major, with 18 more of the royal train of artillery, were loſt in one boat, and but one man of the whole was ſaved.

We hear from Dartmouth, in Nova-Scotia, that at a ſmall diſtance from the back of that ſettlement, two very fine and extenſive coal mines have been diſcovered, ſaid to be not in the leaſt inferior to moſt of ours in the North of England.

COUNTRY.

Bath, Oct. 26, 1764.

THIS day the coporation of this city unanimouſly voted that the town-clerk ſhould wait on the right hon. lord chief Juſtice Pratt, their worthy recorder, with the following letter;

To the right hon. lord chief Juſtice PRATT.

We the mayor, aldermen, and common council of the city of Bath, beg leave to preſent our grateful acknowledgments of your upright and ſteady conduct on trying occaſions in that high office, which, by his majeſty's goodneſs to his people, you now ſuſtain. And the near connection we have the honour of bearing with you, ſir, as a member of our corporation, not ſuffering us to be any longer ſilent, we, with great ſincerity and reſpect, join the public voice, teſtifying to you our thanks; and that a monument may remain amongſt ourſelves of

of our perſonal and particular reſpect and juſt attention to your character and conduct, deſire you would permit us to aſk you to ſit for your picture, as a perpetual memorial of what ought never to be forgot by us or our poſterity, whilſt the ſpirit of law and liberty remains in any part of this free and independent kingdom.

To which his lordſhip ſoon after return'd the following anſwer:

To LEWIS CLUTTERBUCK, Eſq; town-clerk.

SIR, *Oct.* 26, 1764.

My connection with the city of Bath makes me receive the honour of this compliment with particular ſatisfaction, and I feel a moſt ſenſible pleaſure in finding that my conduct has been approved by that corporation. I hope I have done my duty; I have endeavoured to the utmoſt of my abilities to adminiſter juſtice according to the laws of this kingdom, to which I am bound by all the ties of oaths and conſcience, as well as by thoſe of allegiance and gratitude to the beſt of ſovereigns: the law of the land ſhall always be, as it ought, my only guide and maſter, from which I have learnt that the prerogative of the crown, and the liberty of the ſubject, ſpring from one parent root, the good of the people, and are ſo cloſely knit together, that they are conſtitutionally inſeperable. I beg the favour of you to repreſent to the corporation how ſtrong I feel the marks of regard which they are pleaſed to expreſs for me in their unanimous reſolution: and I entreat you to convey to them my beſt acknowledgments for the notice whereby they have ſo obligingly diſtinguiſhed

Your moſt obedient humble ſervant,

C. PRATT.

The 20th of October a bailiff, who went to arreſt a collier at the pits on the Clee Hills, in Shropſhire, was killed by the ſaid collier, who has been apprehended and committed to Shrewſbury gaol, as have likewiſe four other colliers, who were ſpectators of the murder.

Wirkſworth, in *Derbyſhire*, *October* 25. There has been a tumult in the lower part of this county, about Newell on Trent, and Burton, occaſioned by ſome colliers, &c. refuſing to pay 8s. 4d. per buſhel for wheat. It has been ſold for that money in the market, which they thought unreaſonable, as it took ſo much of their money for bread only. So they enquired out both buyer and ſeller, brought them face to face, and obliged the ſeller to return 3s. 4d. of the money per buſhel, and cleared the market of all the wheat at 5s. per buſhel.

Oxford, *Nov.* 10. Laſt Tueſday morning, about a quarter paſt four o'clock, a ſlight but very alarming ſhock of an earthquake was felt here; which, however, providentially did very little, if any damage, to either the public or private buildings.

The 4th inſtant in the evening, a country fellow, who had juſt quitted his ſervice, and received his wages, was met with near Dormington, in Herefordſhire, by two highwaymen, who knocked him down, and cut out one of his breeches pockets, (in which was about three pounds) and got clear off with their booty.

We hear from Coventry, that, after the example of the city of London, the corporation has cauſed moſt of the gates to be taken down; and a very ſpacious road is making towards Weſt-Cheſter.

LONDON.

Nov. 1.

JOhn Wilket, Eſq; had ſentence of outlawry pronounced againſt him at the ſheriff's county court in Holborn, by the ſheriff, coroner, and other officers.

15. Saturday laſt was exhibited at a mathematical inſtrument maker's, behind St. Clement's church, in preſence of two lords of the admiralty, and ſeveral members of the royal ſociety, the trial of a new-invented hydroſtatic machine, for extracting water out of ſhips, by the preſſure of the air and centrifugal force; which their lordſhips and all preſent highly approved. The laſt trial is to be made on board a 60 gun ſhip, now fitted out at Woolwich, previous to its being introduced into practice in the royal navy.

17. Yeſterday the will of the late right hon. Sir Thomas Clarke, maſter of the rolls, was opened, in which are the following legacies, viz. To St. Luke's hoſpital, 30,000 l. To Mr. Seddon, one of his executors, 1000 l. To Mr. Turner, his train-bearer, 400 l. And to each of his ſervants, 20 l. The earl of Macclesfield is his reſiduary legatee.

St. James's, *Nov.* 17. The king has been pleaſed to grant unto his dearly beloved brother prince William Henry, and to the heirs male of his royal highneſs, the dignities of a Duke of the kingdom of Great-Britain, and

and of Earl of the kingdom of Ireland, by the names, ſtiles, and titles, of Duke of Glouceſter and of Edinburgh, in the ſaid kingdom of Great-Britain; and of Earl of Connaught, in the ſaid kingdom of Ireland.

20. Some perſons having taken down the oration of the king of Poland, whilſt he was ſpeaking it, the 13th of laſt month, in the cathedral of St. John at Warſaw, after having received the diploma of election and taken the oath on the royal capitulation, an exact copy has ſince been publiſhed at Dantzick. The following is a tranſlation of the concluſion of it.

"You, Sir, (addreſſing himſelf to the marſhal of the dyet) are the interpreter of that lofty Nobleſſe who enjoined me to command in the Republic according to the laws. Be equally on my part the agreeable and authoriſed interpreter of the ſincerity of my invariable intentions. Aſſure them, that I will employ all the days and means which Heaven ſhall grant me, to anſwer the wiſhes of my dear countrymen: but demand of them at the ſame time, beſeech, conjure them to aid and aſſiſt him who aims at nothing but their good.

"Who is there that does not ſee, that feels not the public misfortunes? Sorrowful experience has pointed out to us the empoiſoned ſource from whence flow all our calamities. Envy and Intereſt have produced diſcord, and that has deſtroyed every thing. In diſturbing our councils, it has blunted in our hands the inſtruments of defence and glory; and thoſe treaſures which ſhould ſecure the ſtrength and ſplendor of the ſtate, are become the prey of a Luxury ſo much the more pernicious, as it is the more ſignal and glaring.

"Let Union, then, perform what cannot be done without it. The ſmall number, you are ſenſible, can more eaſily throw down, than the large can build up. Let emulation, that virtue ſo bordering yet ſo different to envy, animate us; let us all endeavour to outſtrip each other in aiming at the ſole merit, at the glory alone of well-ſerving the ſtate. But what will the hopes and the prayers of humanity avail, if they are not approved by Him who with a breath raiſes and overthrows empires.

"Great God! O! Thou who haſt raiſed me to the poſt I am in; thou doeſt nothing in vain; thou haſt given me the crown with the ardent deſire of reſtoring the ſtate. Finiſh thy work; let the voice of my prayer penetrate unto Thee; finiſh, Great God, thy work! Pour into the hearts of all the nation that love for the public weal with which mine abounds."

Mr. Williams is committed to the King's Bench, and will receive ſentence the firſt day of next term, for republiſhing the North Briton, No. 45. in volumes.

B——KR——TS.

Oct. 27. Edmund Powdich, of Burnham Market in the county of Norfolk, linen draper.

30. Joſeph Maneſty of Liverpoole, in the county of Lancaſter, merchant.—Aaron Brandon, and Samuel Cortiſſon, of New London-ſtreet, in Crutched Friars, merchants and copartners.—Robert Huſband, now or late of Oxford Road, leather-breeches-maker and glover.—John Hill, of Weſt-Ham, Eſſex, brewer.—Thomas Tootell, of Weſt-Ham, Eſſex, callico-printer, and linen-printer.—Iſaac Henriques Samuda, of Lemon-ſtreet, Goodman's Fields, London, merchant.

Nov. 3. William Evans, of St. James's, Clerkenwell, Middleſex, victualler.——Charles Tapping, of Leadenhall ſtreet, London, Seedſman.—Thomas Lewis, of Liverpoole, bread-baker.

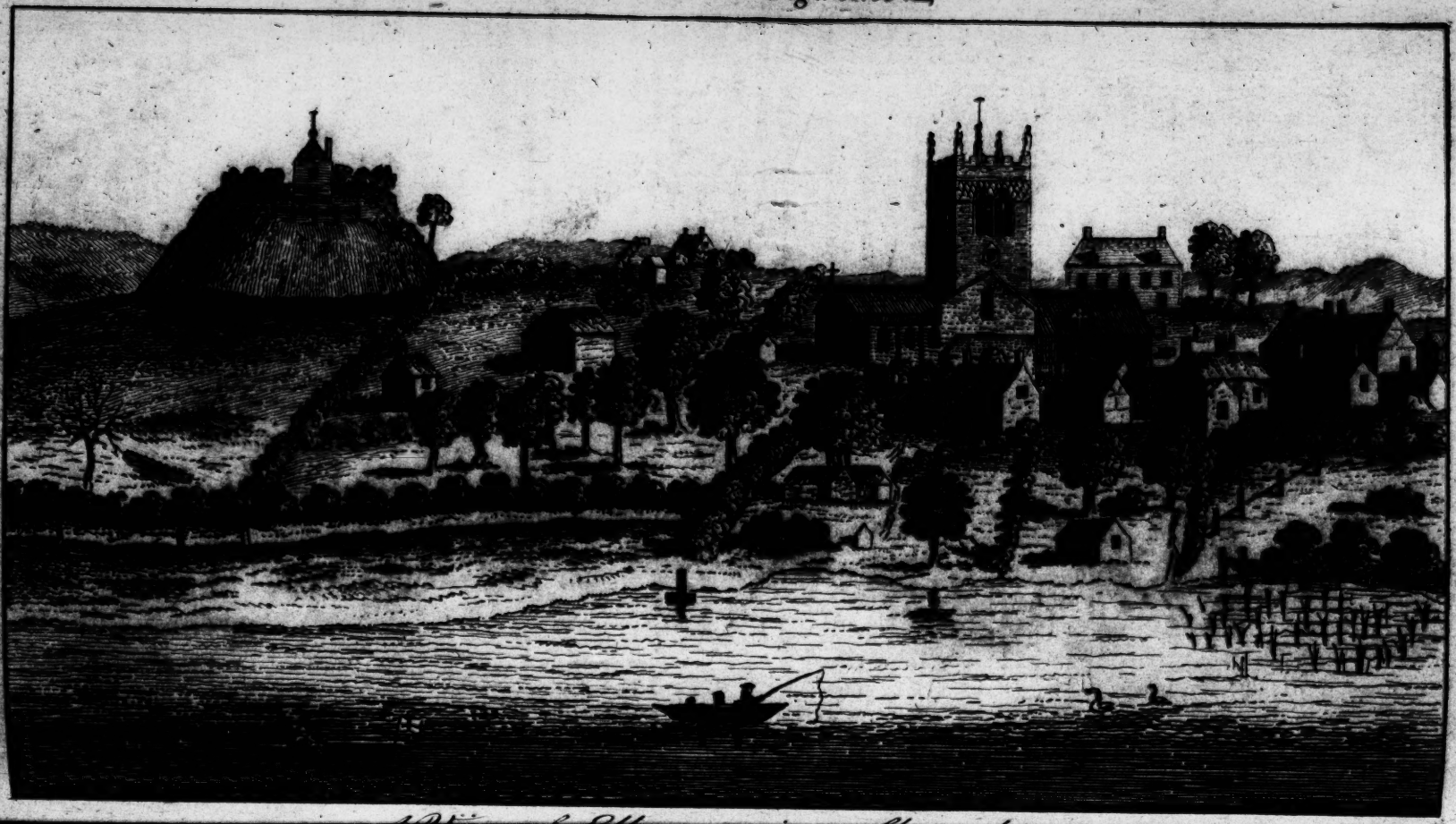
6. William Murvell, of the Strand, Haberdaſher.—John Henry Bartels, of St. Martin's Lane, Cannon-ſtreet, London, merchant.

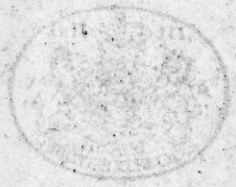
10. Alexander Maſter, of Smithfield, London, and Edward Raby, of the Borough, Southwark, Ironmongers and copartners.—John Scanlan, of Dean-ſtreet, Soho, dealer.—John Ellis of St. Margaret, Weſtminſter, victualler.—Thomas Collins the younger, of the pariſh of St. Nicholas Warwick, in the county of Warwick, ſkinner.

BILL *of Mortality from* Oct. 23. *to* Nov. 20.

Buried,		Chriſtened,	
Males — 894 }	1777	Males — 663 }	1288
Females 883 }		Females 625 }	
Under 2 years old	549	Buried,	
Between 2 and 5	171	Within the Walls	157
5 and 10 ——	83	Without ——	446
10 and 20 ——	82	*Midd.* and *Surry*	851
20 and 30 ——	148	City & Sub. *Weſt.*	323
30 and 40 ——	185		——
40 and 50 ——	171		1777
50 and 60 ——	158		
60 and 70 ——	116	Weekly, *Oct.* 30.	440
70 and 80 ——	73	*Nov.* 6.	405
80 and 90 ——	37	13.	538
90 and 100 ——	4	20.	394
100 and 109 ——	0		——
	1777		1777

For the General Magazine.





The GENERAL MAGAZINE,

For *DECEMBER*, 1764.

On CONTENTMENT. *A* FABLE.

I Am inclined to think that the misfortunes, as they are termed, of life, are not ſo often owing to the want of care, as the having too much, and being over ſolicitous to acquire, what nature the great ſubſtitute of Heaven would effect for us, if we would be contented to follow her dictates. The brutes, led on by that inward impulſe we call Inſtinct, never err in their purſuit after what is good for them; but man, enlightened by reaſon, that particular mark of providence which diſtinguiſhes him from the reſt of beings, obſtinately refuſes to be conducted to happineſs, and travels towards miſery with labour and fatigue. It would be abſurd to ſay a rational creature would voluntarily chuſe miſery, but we too frequently do it blindly. Every thing, as the philoſophical emperor obſerves, is fancy; but as that fancy is in our own power to govern, we are juſtly puniſhed if we ſuffer it to wander at will; or induſtriouſly ſet it to work to deceive us into uneaſineſs. The moſt ſure and ſpeedy way to detect any mental impoſture is by ſoliloquy or ſelf-examination, in the way laid down by our great reſtorer of ancient learning. If our fancy ſtands the teſt of this mirror, which repreſents all objects in their true colours, 'tis genuine, and may be accepted by the mind with ſafety; but if it recedes from the trial, or changes in the attempt, 'tis ſpurious, and ought to be rejected. This will inform us that the great miſtake of mankind in the purſuit after happineſs, is caſting their looks at a diſtance for lands of paradiſe, whilſt the proſpect, ſo much ſought after, blooms unbeheld around them.

At *Iſpahan* in *Perſia*, there lived a young man of a noble family and great fortune named ACHMET, who from his infancy ſhewed the earlieſt ſigns of a reſtleſs and turbulent ſpirit; and though by nature endowed with an underſtanding ſuperior to any of his age, was led away with every guſt of paſſion to precipitate himſelf into the greateſt dangers. After having a little experienced the misfortunes that accrue from ſuch a diſpoſition, he became ſomewhat more diffident of his own abilities, and determined to take the advice of thoſe who had been moſt converſant with human nature, how to proceed for the future. There dwelt not far from the city, in a little cell among a ridge of mountains an old hermit, who many years before had retired from the world to that place to ſpend the reſt of his days in prayer and contemplation. This good man became ſo famous through the country for his wiſdom and exemplary life, that if any one had any uneaſineſs of mind, he immediately went to ABUDAH (for ſo he was called) and never failed of receiving conſolation, in the deepeſt affliction, from his prudent counſel; which made the ſuperſtitious imagine, that there was a charm in the ſound of his

his words to drive away deſpair and all her gloomy attendants. Hither *Achmet* repaired, and as he was entering a grove, near the ſage's habitation, met according to his wiſhes the venerable recluſe; he proſtrated himſelf before him, and with ſigns of the utmoſt anguiſh, "Behold, ſaid he, O divine *Abudah*, favourite of our mighty prophet, who reſembleſt *Allha* by diſtributing the balm of comfort to the diſtreſſed, behold the moſt miſerable of mortals"—He was going on, when the old man, deeply affected with his lamentations, interrupted him, and taking him by the hand, "Riſe, my ſon, ſaid he, let me know the cauſe of thy misfortunes; and whatever is in my power ſhall be done to reſtore thee to tranquillity." Alas! replied *Achmet*, how can I be reſtored to that which I never yet poſſeſſed! for know, thou enlightened guide of the faithful, I never have ſpent an eaſy moment that I can remember, ſince reaſon firſt dawned upon my mind. Hitherto, even from my Cradle, a thouſand fancies have attended me through life, and are continually, under the falſe appearances of happineſs deceiving me into anxiety, whilſt others are enjoying the moſt undiſturbed repoſe. Tell me then, I conjure thee by the holy temple of *Mecca*, from whence thy prayers have been ſo often carried to *Mahomet* by the miniſters of Paradiſe, by what method I may arrive, if not at the ſacred tranquillity thou enjoyeſt, yet at the harbour of ſuch earthly peace as the holy *Koran* has promiſed to all thoſe that obey its celeſtial precepts; for ſure the damned, who remove alternately from the different extremes of chilling froſts and ſcorching flames, cannot ſuffer greater torments than I undergo at preſent." *Abudah* perceiving that a diſcontented mind was the ſource alone of the young man's troubles, "Be comforted, my ſon, ſaid he, for a time ſhall come, by the will of Heaven, when thou ſhalt receive the reward of a true believer, and be freed from all thy misfortunes; but thou muſt ſtill undergo many more, before thou can'ſt be numbered with the truly happy. Thou enquireſt of me where happineſs dwells. Look round the world, and ſee in how many different ſcenes ſhe has taken up her reſidence; ſometimes, though very rarely, in a palace, often in a cottage; the philoſopher's cave of retirement, and the ſoldiers tent amid the noiſe and dangers of war, are by turns her habitation; the rich man may ſee her in his treaſure, or the beggar in his wallet. In all theſe ſtations ſhe is to be found, but in none altogether. Go then and ſeek thy fortune among the various ſcenes of the world, and if thou ſhould'ſt prove unſucceſsful in this probationary expedition, return to me when ſeven years are expired, when the paſſions of youth begin to ſubſide, and I will inſtruct thee by a religious emblem, which our great prophet ſhewed me in a dream, how to obtain the end of all thy wiſhes." *Achmet*, not underſtanding *Abudah*'s meaning, left him as diſcontented as he came, and returned to *Iſpahan* with a full reſolution of gratifying every inclination of pleaſure or ambition, imagining one of theſe muſt be the road to felicity. Accordingly he gave up his firſt years entirely to thoſe enjoyments which enervate both mind and body; but finding at length no real ſatisfaction in the poſſeſſion of theſe, but rather diſ-

eaſes

eaſes and diſappointments; he changed his courſe of life, and followed the dictates of avarice, that was continually offering to his eyes external happineſs ſeated on a throne of gold. His endeavours ſucceeded, and by the aſſiſtance of fortune he became the richeſt ſubject of the eaſt. Still ſomething was wanting. Power and honour preſented themſelves to his view, and wholly engaged his attention. Theſe deſires did not remain long unſatisfied, for by the favour of the *Sophy* he was advanced to the higheſt dignities of the *Perſian* empire. But alas! he was ſtill never the nearer to the primary object of his moſt ardent wiſhes! fears, doubts, and a thouſand different anxieties that attend the great, perpetually haunted him, and made him ſeek again the calm retirement of a rural life. Nor was the latter productive of any more comfort than the former ſtations. In ſhort, being diſappointed, and finding happineſs in no one condition, he ſought the hermit a ſecond time, to complain of his fate, and claim the promiſe he had received before the beginning of his adventures. *Abudah* ſeeing his diſciple return again after the ſtated time, ſtill diſcontented, took him by the hand, and ſmiling upon him with an air of gentle reproof, "*Achmet*, ſaid he, ceaſe to blame "the fates for the uneaſineſs which "ariſes alone from thy own breaſt; "behold, ſince thou haſt perform-"ed the taſk I enjoined in order "to make thee more capable of "following my future inſtructions, "I will unfold to thee the grand "miſtery of wiſdom, by which ſhe "leads her votaries to happineſs. "See (ſaid he, pointing to a river "in which ſeveral young ſwans "were eagerly ſwimming after "their own ſhadows in the ſtream) "thoſe ſilly birds imitate mankind; "they are in purſuit of that which "their own motion puts to flight; "behold others that have tired "themſelves with their unneceſſary "labour, and ſitting ſtill, are in "poſſeſſion of what their utmoſt "endeavours could never have ac-"compliſhed. Thus, my ſon, "happineſs is the ſhadow of con-"tentment, and reſts, or moves for "ever with its original.

On the Laws *of* England.

Case *concerning the Wife's Thirds, by the Cuſtom of the* City *of* London.

S. W. citizen, armourer, and brazier, of *London*, who was a married man, but had neither children, nor grand-children, living at his death, died poſſeſſed of a clear perſonal eſtate amounting to about 3200l.

Aug. 2, 1737, he made his will, and therein gave his wife *Alice* all his plate, jewels, linen, woollen, houſhold goods and furniture, and all ſuch ſums of money as ſhe ſhould have in her own poſſeſſion at his death, or ſhould have placed out at intereſt, or otherwiſe, (which money the deceaſed imagined to be about 500l. but is not reckoned in the above computation of his eſtate) for, and during the term of her natural life. He alſo gave her the intereſt of all ſuch ſums of money as he ſhould have at his death in the funds, or as ſhould be placed out on mortgage or otherwiſe, and the rent, &c. of his two houſes in *Crown Court* (value about 8l. *per annum* each) for her own ſole uſe and diſpoſal, for ſo long as ſhe ſhould remain his widow, and no longer; and then wills and deſires

that what he had ſo given to his ſaid wife, and ſhould therein after give to her relations, ſhould be accepted by her, and deemed and taken to be in lieu, full ſatisfaction, and diſcharge of ſuch part of his perſonal eſtate as ſhe by the cuſtom of the city of *London* would be otherwiſe intitled to.

Of this will he made his ſaid wife ſole executrix, but ſhe being at that time, as ſhe for many years before had been, inſane in her mind, and not capable of managing and tranſacting her own affairs (though at ſometimes ſhe had lucid intervals for a day or two together, at which times, ſhe would talk and diſcourſe very rationally and ſenſibly) the deceaſed, therefore, gave to *T. B*, *R. H*, *B. W*, *J. A*, and *R. A*, and the ſurvivor of them all his ſtocks in the funds, monies at mortgage or otherwiſe out at intereſt, or in caſh by him at his death, (except the ſaid money in his wife's poſſeſſion, &c.) in truſt to permit her to receive the intereſt, dividend, &c. thereof, ſo long as ſhe ſhould continue a widow, and after her deceaſe, then he gave the ſame, together with the plate, jewels, goods, and monies which he had before given to his wife for life, to them, and the ſurvivor of them, upon truſt to ſell the plate, jewels, and furniture, &c. and then to pay and diſpoſe of the whole eſtate as he therein directs, *viz.*

To ſeveral of his wife's relations, as follows, *viz.*

	l.	*s.*	*d.*	*l.*	*s.*	*d.*
To his wife's ſiſter *C. B.* and to each of her children, being two, and to the daughter of his wife's ſiſter *M. C.* and to the two daughters of his wife's brother *J. E.* to each.	20	0	0	120	0	0
To his wife's ſiſter *M. C.*				20	0	0
To *J. C.* ſon of ſaid *M. C.*				20	0	0
To his wife's kinſwoman the widow *K.*				10	0	0
				170	0	0
He then gave to his own relations, and others, as follows, *viz.*						
To *S.* wife of ſaid *R. A.* who was a diſtant relation				40	0	0
To *Charles* and *Henry A* and their ſiſter, and to his kinſwoman *E. S.* to each	10	0	0	40	0	0
To the daughter of ſaid *E. S.*				5	0	0
To ſuch of the grand-children of his niece *E. M.* as ſhould be living at his wife's death, of whom there are ſix, to each	20	0	0	120	0	0
To his niece *Ann*, wife of *H. B.* 200l. over and above any legacy therein, after giving her, as an equivalent for the legacies by him given to the children of his niece *E. M.*				200	0	0
Note, This legacy is given her excluſive of, and independent of her huſband.						
To each of the children of his ſaid niece *M.* as ſhould be living at his death, of which there were nine	100	0	0	900	0	0

To

To all such children of his niece *B.* as should be living at his death, of which there was but one	100 0 0—100 0 0	
To the trustees of the charity school of St. *Martin's* in the *Fields.*		10 0 0
To those of the parish of St. *Clement Danes*		10 0 0
To the poor of the armourers company		20 0 0
To the maid servant as should live with him at his death		5 0 0
To such of his said five trustees as should accept of and act in the trust, to each	20 0 0—100 0 0	
	Total	1550 0 0

He then proceeds, and declares, That notwithstanding his aforesaid devise to his wife, his will and meaning is, that if she should not accept of what he had given her, and her relations, by his said will, but should claim her share of his personal estate, according to the custom of the city of *London*, or that she should marry after his decease, he then revokes the legacies given to her, and her relations, and declares that she shall have no other benefit from his estate than what she can claim by virtue of the custom of *London*, but in case his wife should accept of the legacies so given to her and her relations, and not dispute his will, but should die a widow, without having married after his decease, he then directs, that the legacies, which he had so given to her relations, should be paid them within one year after his wife's decease, and wills that his other legacies also should be paid in the same time, or sooner if it could be done.

He gives the whole residue of his estate to be equally divided between his said two nieces *E. M.* and *A. B*; and to be at their sole disposal, exclusive of their husbands.

He then constitutes his wife executrix of his will during her life; and after her death, makes his said two nieces *M*, and *B*, executrixes thereof, independent of their husbands.

He then directs that an inventory should be taken of his whole personal estate, as soon as may be after his death; and, that each of his said trustees, as well as his said executrix, should have a copy, with all their names respectively subscribed thereto.

He then assures his wife, that the reason of his making his will in that manner was, *on account of her long indisposition, which renders her unfit to manage her own affairs, and to dispose of her own effects*; and adds, *that 'twas for the same reason he directed an inventory should be made in that manner, which would be a means to prevent any from defrauding her of her goods and effects.*

He then directs his trustees after his wife's decease, and as soon as his legacies are paid according to the directions and limitations of his will, to transfer and assign over the residue of his estate to his said two nieces, their executors and administrators equally, as is therein before directed and appointed.

By a codicil indorsed upon his will, he directs, that in case his wife should after his decease be so disordered in her understanding as to require confinement, his trustees

should

ſhould take care to have her placed in ſome private houſe, where ſhe may be carefully looked after, but earneſtly deſires ſhe may not be ſent to *Bedlam* or to any public madhouſe.

Note, The money mentioned in the teſtator's will to be in his widow's poſſeſſion, and was computed at 500l. could never be found, nor is it known what is become thereof.

Nov. 2, 1737. Teſtator died, leaving his wife *Alice*, ſo much diſordered in her ſenſes, reaſon, and underſtanding, that ſhe was then utterly incapable of declaring her acceptance, or non acceptance of her huſband's will, or of taking the executrixſhip upon her, or of managing, or tranſacting any affairs of moment and concern; and, thereupon, upon full affidavits of ſuch incapacity made by *F. A.* (brother of ſaid *R. A.*) a ſurgeon, and of *C. S.* her maid ſervant, who had attended her for a year and an half, the judge of the prerogative, on the

12th ditto, Was pleaſed to grant adminiſtration (with teſtator's ſaid will annexed) of his goods, chattels, and credits unto the ſaid *T. B*, *R. H*, *B. W*, *J. A*, and *R. A*, the truſtees afore named for the uſe and benefit, and during the lunacy, delirium, or incapacity, of her the ſaid *Alice*.

Teſtator having by his will deſired that his wife might in no caſe be ſent to *Bedlam*, nor to any public mad-houſe, but be kept in a private houſe, ſaid *R. A.* one of the aforenamed truſtees, about a week, or ſome ſuch ſhort time after ſaid adminiſtration was granted, inſinuated to the other truſtees, that it was abſolutely improper and hazardous to let the deceaſed's wife be left in her own houſe under the care of her own ſingle ſervant only; and told them that he had a very handſome apartment in his houſe, ſufficient for her and her maid ſervant; and, that out of the great regard and reſpect he had for her, and for the memory of the deceaſed, he would lodge and board her, and her ſervant in that apartment; and that his wife (for whom he pretended ſhe (the widow) had a great kindneſs; and whom, ſhe would be better pleaſed to be with, than with any other) ſhould take care of, and look after her, provided they would make him ſuch reaſonable allowance as would be ſuitable to the great trouble himſelf and family muſt neceſſarily have with ſuch a lodger; whereupon, the other truſtees being deluded by theſe, and other ſuch like artful pretences and inſinuations of his, and not in the leaſt ſuſpecting the vile fraud which was afterwards practiſed, conſented to, and agreed to allow him (*R. A.*) 80l. a year, for their lodging, diet, &c. and ſent her and her ſaid maid ſervant, thither immediately, where ſhe continued till her death, which happened the 21ſt of *March* following.

During the time that teſtator's widow ſo lodged and boarded with *R. A*, ſhe was firſt ſeized with a fit of a *palſy*, which held her for ſometime, but of which, by the care of her phyſician, ſhe afterwards recovered; after which, ſhe was ſeized with a high *fever*, of which, ſhe was likewiſe recovered; and, 'twas obſerved, that *theſe two ſhocks* had weakened and impaired *her intellectual faculties ſo much that ſhe was totally incapable of managing or tranſacting any buſineſs* herſelf, and was very eaſy and capable of being impoſed upon, or made to do any act her landlord, or rather her keeper, or his wife, would have her to do; but *ſtill ſhe was not ſo abſolutely void, or ſo intirely diveſted of reaſon, but that ſhe would now and then talk rationally and ſenſibly*; and, particularly when Mr. *B. W.*

B. W. and Mr. *R. H.* two of the ſaid truſtees went to ſee her there at *R. A.*'s, as they ſometimes did, *ſhe hath upon their aſking her, declared that ſhe was well ſatisfied with what her huſband had done for, or left her by his will, and that ſhe would accept of it, or to that effect.*

Feb. 19, 1737-8, Its pretended teſtator's ſaid widow made her will of that date, wherein, after the uſual preamble of recommending her ſoul to GOD, and ordering her funeral, are recited, the ſeveral deviſes made to her by her huſband's ſaid will, the conditions upon which they were ſo made, and the revocation of the legacies thereby given, to her and her relations, in caſe of her non-acceptance of that will (but it's obſervable that not any one of the legacies given by her ſaid huſband's will to any of her relations is ſpecified in it) after which ſhe is made to declare as follows, to wit,

Now I, the ſaid *Alice W.* by virtue and in purſuance of the power to me given in, and by the ſaid laſt recited will and teſtament [meaning her huſband's aforeſaid will] do hereby declare, that *I will not accept* of what was given me by my ſaid huſband for my life, in, and by the ſaid will, but, that I will, and I do, hereby claim *my thirds*, out of my ſaid huſband's perſonal eſtate, according to the cuſtom of the city of *London*; and, therefore do make, and declare, this my laſt will and teſtament, in manner and form following: then ſhe proceeds and gives away ſeveral legacies as follows, *viz.*

	l. s. d.	*l. s. d.*
To her ſiſter *G. B.* and to each of her children, being two, and to her ſiſter's daughter *M. C.* and to the two daughters of her brother *J. E.* to each —— —	40 0 0	—240 0 0
To her ſaid ſiſter *M. C.* ——		40 0 0
Note, theſe legacies are juſt double to what was given them by her huſband's ſaid will.		
To *J. C.* ſon of ſaid *M. C.* ——		50 0 0
Note, this was but 20l. in the huſband's will.		
To her kinſwoman the widow *K.* ——		20 0 0
Note, this was but 10l. in the huſband's will.		

All the reſidue of her eſtate is therein given to ſaid *R. A.* who is likewiſe made her ſole executor.

March 21, 1737-8, the ſaid *Alice W.* died, and the very next day, ſaid *R. A.* proves her ſaid will in the prerogative court of *Canterbury*.

26 Ditto, being the *Sunday* following, ſaid *Alice* was buried, and the manner of her funeral was (as her huſband's before had been) ordered and directed by the five truſtees jointly, for *R. A.* never acquainted any of the other four truſtees, either that ſhe had made this will, or that he had taken probate thereof upon him, nor hath he yet acquainted them of it, but hath ſuffered them to proceed in the manner they before did.

The adminiſtration, with the teſtator's ſaid will annexed, granted to the five truſtees, in manner as aforementioned, being expired by reaſon of the death of his ſaid widow and relict,

27 Ditto, the teſtators ſaid two nieces *E. M.* and *A. B.* who were ſubſtituted executrixes thereof, after her death, took probate of the ſaid

ſaid will upon them, whereby the truſtees power to collect and receive the teſtator's eſtate is determined, though their truſt as to the payment of the legacies, &c. ſtill ſubſiſts in them.

Note, that *C. B.* and *M. C.* the deceaſed's two ſiſters aforementioned are her only next of kin.

Q. What part or how much of his perſonal eſtate can a freeman of *London*, who dies married, but leaves no children living behind him, diſpoſe of by his will, and what part or how much of his eſtate can his widow claim, or will be entituled to in that caſe?

A. The neat perſonal eſtate of a freeman of *London*, who leaves a widow behind him and no children, after his debts, and funerals are diſcharged, and an allowance made for the widow's chamber, by the cuſtom of the city, is to be divided into two equal parts, one whereof, the freeman may diſpoſe of as he thinks fit, and the remaining part belongs to his widow: who is, likewiſe, intitled to her *paraphernalia* (that is to ſay) her wearing apparel, and the ornaments of her perſon, which ſhe uſually wore, and which were ſuitable to her huſband's eſtate and degree. The uſual allowance for the widow's chamber is the fortieth part of the neat perſonal eſtate, provided ſuch fortieth part doth not amount to more than fifty pounds in the whole *Sim. Urlin.*

Q. Will the deviſe of the intereſt, income, or proceed of the teſtator's whole eſtate to his wife, for her life, and of the particular legacies given by his will to her relations, after her death, be looked upon and deemed to be a ſufficient ſatisfaction, compenſation, or equivalent, for that part of his eſtate which ſhe might have claimed by virtue of the cuſtom of the city of *London*, as his widow, and will it bar her repreſentatives from claiming ſuch her cuſtomary part now or not, and for what reaſon?

A. The deviſe of the intereſt and income of the teſtator's whole perſonal eſtate to his widow for life, and of the particular legacies given to her relations after her death, ſeems to me not to be a ſufficient compenſation, or equivalent for her cuſtomaay ſhare, mentioned in my anſwer to the foregoing quere: More eſpecially as the ſame is deviſed to her upon condition of her continuing a widow. But, had the ſame been an equivalent in value; yet, as the widow's intereſt in her cuſtomary ſhare ſo attached in her by the intermarriage, that the huſband could not, either by his laſt will, or any act of his to take place at his death, defeat the ſame, in caſe ſhe ſurvived him. I am of opinion, that ſaid deviſe, could not have barred her in her life time, nor can now bar her repreſentatives ſince her death, from claiming part; unleſs the widow, ſince the teſtator's death, hath in a proper manner accepted of ſuch deviſe; and thereby determined her election, (which ſhe could otherwiſe be intitled to) either of adhering to her huſband's will, or inſiſting upon her cuſtomary claim.

Sim. Urlin.

The huſband has no power by his laſt will, or otherwiſe, to clog, or annex any conditions to his widow's ſhare, due by the cuſtom of the city of *London*, but, after his death, it is as free, and as abſolute, as what he has the power to diſpoſe of, is in him:

him: ſhe is not obliged to accept of an equivalent, and in the preſent caſe what the teſtator has given by will to his wife and her relations, conſidering her age, was not a ſufficient equivalent for her moiety by the cuſtom.

Yet if ſhe during a clear lucid interval has aſſented to ſuch deviſe, and knowingly has rather choſen to have the whole income of his eſtate to her own uſe, during her life, to ſupport her with greater convenience under the misfortune ſhe was liable to, with ſmaller bequeſts to her relations after her death, ſuch acceptance will, I conceive, be as effectual as if the equivalent had been greater, and might, if ſhe had lived long, have proved of greater ſervice to her than her cuſtomary part, and will, therefore, bar her repreſentatives from claiming the ſame; but in caſe ſhe was incapable of aſſenting, or did not aſſent, it will go to her repreſentatives.

J. Andrew.

In caſe the will of the teſtator's widow ſhould be ſet aſide, by reaſon of her incapacity to make a will, or by reaſon of fraud or impoſition upon her, or from any other cauſe, and as ſhe hath ſo often declared to ſome of the truſtees of her huſband's will, that ſhe was ſatisfied with it, and accepted of it.

Q. Will ſhe be deemed to have acquieſced under that will, and to have been bound by the conditions of it, and will her repreſentatives be thereby or from any other, and what cauſe or reaſon barred from claiming her cuſtomary part of her huſband's eſtate or not, or will they be intitled to ſuch cuſtomary part or not, and for what reaſon?

I know of no caſe, where the manner, or form of a concluſive acceptance (in a caſe of this nature) is preciſely ſtated and determined; and every ſuch caſe muſt, in a great meaſure, depend upon its own particular circumſtances. But, upon the whole, I incline to think, that the occaſional declarations of the widow (as ſtated in the caſe) of her acquieſcence under the will, and without any releaſe or other formal act of renunciation of her cuſtomary claim, will not be looked upon, either in law or equity, ſufficient to bar her, or her legal repreſentatives of ſuch claim; more eſpecially in this caſe; where the bequeſt propoſed by the will, ſeems to be an hard one, and very much to the prejudice of the widow and her family. The ſuſpicious circumſtances, likewiſe, of the widow's capacity to do any legal act, ſince her huſband's death, will, probably, be taken into conſideration, and may incline the courts both of law and equity, to require proof, that an act of ſo much conſequence as this to her, was done with the greater formality, and deliberation.

Sim. Urlin.

Q. Will it be neceſſary or adviſeable to conteſt or litigate the validity of the teſtator's widow's will, or not, and for what reaſon? and if it ſhould, who will have the right to conteſt it? Can the truſtees of the huſband's will or the ſubſtitute executrixes of that will any ways bring it into controverſy or not, or muſt the next of kin of the widow do it, or any other, and who?

In caſe there was not a ſufficient aſſent to bind her, it will be for the intereſt of her next of kin to con-

trovert the validity of her will; but the ſubſtituted executrixes or truſtees in the huſband's will, cannot, I conceive, be admitted to oppoſe it, as they can have no intereſt under an inteſtacy; yet as there is an expreſs clauſe of diſſent contained in that will, which, although it could not operate, if ſhe has firſt fully aſſented, it may be a further preſumption in caſe the will ſtands good, that ſhe did not ſo fully underſtand what ſhe before aſſented to, and her aſſent will be expected to be fully proved.

J. Andrew.

As teſtator's widow hath by her ſaid will declared, that ſhe will and doth thereby claim her *Thirds* out of her ſaid huſband's perſonal eſtate, according to the cuſtom of the city of *London*; and if by that cuſtom ſhe ſhould happen to be entitled to more than a third of his eſtate.

Q. Will ſuch declaration bind and oblige her repreſentatives to accept of that *third* in full ſatisfaction of her cuſtomary part or ſhare of teſtator's eſtate, or will he be intituled to more than a third thereof and how much in the whole?

Beſides, the poſitive or affirmative words, (mentioned in the quære) whereby the widow claims her *thirds*, and I obſerve, there are theſe other negative words in the will, *viz.* (I will not accept) ſo that upon the whole, I conceive the ſubſtance of this declaration will be conſtrued to amount to no more than this, *viz.* that ſhe diſclaimes all right under her huſband's will, and inſiſts upon her cuſtomary claim, whatever it be, and the word, *thirds*, will be imputed to her, and the penman of her will's ignorance of the *quantum* of her ſhare, under the cuſtom; and the rather, as it does not appear that ſhe had any intention of releaſing any part of ſuch ſhare, but on the contrary, ſhe inſiſts upon this claim of *thirds*, *according to the cuſtom*; which ſeems to me to manifeſt her intention of inſiſting upon all ſhe was intitled to, according to the cuſtom, and, therefore, as ſhe is intitled to a moity by the cuſtom, beſides her *paraphernalia*, *&c.* I am of opinion that her repreſentatives may now claim ſuch moity, *&c.* notwithſtanding the word *(thirds)* be made uſe of in the will, in the manner mentioned in the caſe.

Sim. Urlin.

Q. As the next of kin of teſtator's widow have double the benefit under her will, that they have by teſtator's will; its poſſible they will not controvert her will, and if they ſhould not, will it be adviſeable for the truſtees or executrixes of the teſtator's will, and which of them, to buy their intereſt in the teſtator's eſtate, and procure an aſſignment of it to them, or either, and which of them, ſo as to enable them to conteſt it in their (the relations) names?

A. It cannot, I think, be adviſeable for the truſtees to procure an aſſignment from the next of kin of their intereſt or power to controvert it in their names, as they are bare truſtees, and have no intereſt in the reſidue of the huſband's eſtate, and their evidence may be wanted, as to the capacity of the teſtatrix, and her aſſent and the circumſtances of the fraud: but if the executrixes who are the reſiduary legatees can obtain it on eaſy terms, on condition of the will being ſet aſide, it may, I think, be their intereſt to do it.

J. Andrew.

Q. If

Q. If the circumſtances ſtated in this caſe ſhould be fully proved, is it probable that the will of the teſtator's widow will be ſet aſide, and for what reaſon?

A. The will appears under the ſtrongeſt ſuſpicion of fraud, and impoſition, and a ſtrong proof of her capacity at the times will be required, and that ſhe knew the contents thereof: but as the teſtatrix had lucid intervals, and it may be ſuſpected that ſuch witneſſes have been got together at the execution, as will depoſe to her capacity and reading the will to her, the event thereof may be doubtful, notwithſtanding that the circumſtances of fraud attending the whole tranſaction, would otherwiſe give hopes of ſetting the will aſide.

J. Andrew.

Q. Under the circumſtances of this caſe, how muſt the teſtator's four other truſtees (who happen to be poſſeſſed of all, or the far greateſt part of his eſtate) act in this caſe, or what will be moſt adviſeable for them to do for their ſecurity, and what will be proper for them and the preſent executrixes of teſtator's will to do? How or in what manner can this matter be brought into litigation, and if any ſuit or ſuits are neceſſary, how, in what manner, in what court or courts, and in whoſe names, muſt ſuch ſuit or ſuits be brought, and who muſt be made parties thereto, and upon the whole, what can, or ought to be done in this caſe?

A. If the truſtees cannot prevail upon the reſpective claimants, under the huſband's, and wife's, wills, to adjuſt the differences between them by an amicable compromiſe; as it ſeems to me to be their common intereſt to do, if it can be effected; I conceive it adviſeable, and even neceſſary, for the truſtees, under the circumſtances of this caſe, to file a bill (ſtating their caſe to the effect as it is here) in ſome court of equity againſt them all, in order to take the directions of ſuch court, touching the execution of their truſt, and to be indemnified therein, by ſuch decree, as will, probably, be made for that purpoſe.

April 11, 1738. *Sim. Urlin.*

I think that the truſtees cannot act ſafely without the conſent of all parties intereſted, or the direction of the court of chancery: but I think it would rather be adviſeable for the executrixes, if they inſiſt on the widow's aſſent to her huſband's will, and their right to the reſidue, to file a bill againſt the executor, and make the truſtees (as I preſume ſhe may) witneſs to the aſſent and fraudulent behaviour of the executors. If they do not, it will be adviſeable for the truſtees to file their bill againſt them and the executor, and to take the direction of the court in the execution of their truſt, in order to ſecure themſelves.

Doctors Commons,
April 10, 1738. *J. Andrew.*

To the Editors of the General Magazine.

Gentlemen,

AGreeable to the promiſe I made you in my letter on the origin of language, publiſhed in the Magazine of laſt month, I now ſend you a ſhort ſketch, from my origin of nations, touching a prize queſtion, now in agitation, before the royal academy of ſciences at *Toulouſe*, concerning the origin and character of the *Tectoſages*, and the extent and ſituation of that part of ancient *Gallia* occupied by them, when the *Romans* entered their country and their excurſions or migrations before that period; which as it may tend to the illuſtrating our own origin and antiquities, may not be unacceptable to your readers.

The plan and method, which I purſued in treating this ſubject being new, makes it neceſſary for me here to remark a little by way of explaining it, before I proceed upon an enquiry into the origin of the *Tectoſages*. You muſt know then that the firſt ſtep I took therein, was to inveſtigate the nature and origin of the *Celtic*, *Greek*, *Latin*, and *Engliſh* languages, according to the natural preciſion, and the original frame and conſtruction thereof; which by means of the ancient *Celtic* dialect of *North Wales*, I was enabled to perform, in ſpight of all the diſguiſe and refinements made in the other dialects. The firſt language of the weſtern part of *Aſia* and *Europe* being thus found out and fixed, I then proceeded to define and explain the ancient names of perſons, places and things of thoſe countries from this newly diſcovered old language; which with the additional teſtimony of ancient writers forms a geographical or hiſtorical lexicon of each particular people and country, and in which many intereſting diſcoveries have been made.

It therein appears that the names mentioned in the firſt part of the book of *Geneſis* are *Celtic*; in particular thoſe mentioned as of the ſons and grand-ſons of *Noe* ſeem to be expreſſive of ſo many different nations and families deſcended from him. As for inſtance, the name of *Japhet*, from whom came the *Tectoſages* and all other *Celtic* nations, in the ancient *Celtic* ſignifies *the part the ſun is at*, that is, the weſt, he being firſt ſettled in the weſtern part of *Aſia*, in order to proceed to *Europe* or the iſles of the *Gentiles*, which according to *Gen.* 10. *v.* 5. had been allotted for his poſſeſſions; and in whoſe limits, as appears from the ſame verſe, his poſterity was ſettled. In vain then do our modern antiquaries ſeek for the ſons of *Japhet* in *Africa* or the other *Aſia*, within the general limits of *Shem* and *Ham*; but did they entertain a due regard for this paſſage of the ſacred hiſtorian and other hiſtorical parts of ſcripture, they would ſee that our poſſeſſions and limits here on earth were allotted us by GOD himſelf in the manner and proportions mentioned in *Geneſis*; and as there is no prophecy foretelling the deſtruction of the *Gentiles*, they might alſo conceive that providence never permitted any colonies of a foreign race to take root amongſt a people, unleſs their extirpation was intended, as in the caſe of the *Jewiſh* nation.

The more weſterly parts being deemed by the ancients, the lower poſſeſſions, from the ſun's appearance of going down in the weſt, *Tyras*, who, as is agreed on all hands to have ſettled in *Thrace*, ſignifies in the

the *Celtic*, *the lower poſſeſſions*. *Madai* has very properly been left in *Media*, from ſome paſſages in *Daniel*, *Eſther*, and other places of ſcripture, and the agreement betwixt his name and that of the country. Next unto him, *Magog*, *Meſhech*, and *Tubal*, of whom *Ezekiel*, in chap. 27, and 38, makes but one nation, were fixed, according to the beſt ancient hiſtorians and geographers, in the upper countries betwixt the *Caſpian* and *Euxin* Seas, which their names likewiſe confirm; for *Magog* in the *Celtic* ſignifies, *about the great Sea*, which was the *Caſpian*; *Tubal*, *on the upper or hilly ſide*; and *Meſhech*, *the plains on the water ſide*. On this country weſtward, in the *Leſſer Armenia*, and *Cappadocia* was placed *Togarmah*, according to ancient hiſtorians; and there his name alſo fixes him; for it expreſſes *upon the confines of the houſe of Og*, or of *Magog* the great *Og*, as *Cappadocia* does, *that it incloſed the part of the houſe of Og*. Still more weſtward of *Togarmah*, on the *Euxin* Sea, in *Paphlagonia*, his brother *Riphath* has been ſeated by ancient hiſtorians and geographers, and there his name fixes him, as expreſſing, *the higher water parts*. Farther weſtward on the *Euxin* in *Bithynia* and *Phrygia*, *Aſchenas* was ſettled, and his name expreſſes, *lower on the lower higher water*; which was the *Euxin*, the *Caſpian* being the higher of the two upper waters, as the *Mediterranean* was deemed the lower water. Near him at *Troas* is ſuppoſed to be the reſidence of his father *Gomir*, whoſe name in a primary Moſaical ſenſe, ſignifies, *the great Commatis*; he being there conveniently ſeated in the van for conducting his bands thus placed in the rear over the *Thracian Boſphorus* into *Europe*; where he had ſent *Tyras* before, in order to clear the country of woods and wild beaſts; ſo that *Gomer* and his bands occupied the paſs of the *Thracian Boſphorus* in the form of an army, ſo as to prevent any other people to paſs that way into *Europe*, as *Magog*, *Meſhech*, and *Tubal* had done at the paſs of mount *Caucaſſus*, between the *Caſpian* and *Euxin* Seas; *Javan* and his ſons having done the ſame in *Ionia*, ſo as to ſecure *Greece*, as *Shem* had done in the other parts of *Aſia*, and *Ham* in *Africa*. If then *Gomer* and his bands were to occupy *Europe*, called in ſcripture the iſles of the *Gentiles*, they muſt have been at firſt ſeated weſtward of *Madai*, *Magog* and *Shem*; elſe he could not have paſſed into *Europe*, but *Ezekiel* 27, 38, and 39, after mentioning *Magog*, *Meſhech*, and *Tubal* as ſettled together in the north quarters near thoſe that dwelt in the iſles, *Gomer* and his bands are mentioned as dwelling north of *Judea*, and having a trade to *Tyre*; *Aſkenas* his ſon, who muſt have ſettled within the father's limits, *Jerem.* in chap. 51, mentions as ſeated weſtward of *Armenia*; where the names of ſeveral places alſo fix him. And as this account correſponds with the opinions of the beſt hiſtorians and geographers, which I have quoted in my work, and who all agree that the *Gauls*, *Celtæ*, and *Cumbri*, eſpecially the *Welſh*, who ſtill call themſelves *Cumbri*, and whoſe language appears by my lexicon to be the firſt language of *Europe*, and *Aſia Minor*, there ſeems to be no room to doubt but that the *Gauls*, and *Cymbri* are the deſcendants of *Gomer* and his bands; nor but that they came into *Europe* by *Thrace*, whatever ſome late northern antiquaries may have ſaid to the contrary.

As it would take up too much of your paper to give a particular detail of the ſeveral migrations from *Thrace* into different parts of *Europe*, before the arrival of the *Romans* in ancient *Gallia*, I am therefore obliged to refer to the work itſelf; but

I would here in general obſerve that *Riphath* and *Togarmah* with a branch of the ancient *Thyraſians* moved eaſtward along the *Euxin* ſhore, till they extended to the river *Tyras*; whilſt *Gomer* and *Aſkenas* with another branch of *Thracians* coaſted and built cities along the *Adriatic*, till they arrived in *Italy*, *Gaul* and *Spain*; from whence they extended their borders into *Denmark*, *Norway*, and *Sweden*, northward, as well as into *Britain*, and *Ireland*, many ages before the arrival of the *Romans* in any part of ancient *Celtica*.

But the general limits and deſcent of the *Cumbri*, *Gallic*, *Celtes*, from whom the *Tectoſages* appear to be deſcended, being particularly ſhewn in the abovementioned work, I ſhall next endeavour to prove that no foreign colonies intermixed with the *Gauls* before the *Romans* entred their country. Now as to any northern colonies *Julius Cæſar*, lib. 6. c. 24 and 25, ſays that the *Gauls* had ſurpaſſed the *Germans* in valour, waged war with them, and by reaſon of the multitude of their people and want of country, they ſent colonies over the *Rhine*; that the *Volcæ Tectoſages* were ſeated in the fertile plains of *Germany* near the *Hercynian Forreſt*; which as he ſays was nine days journey in breadth, and in length above ſixty; that no *German* knew the beginning of it, that is, northward, and that it continued to breed many ſorts of wild beaſts; and in this we have the concurrent teſtimony of *Strabo* and other antient geographers and hiſtorians: but on the contrary the *Boians* a *Gauliſh* people, appear in hiſtory to be the firſt colony that paſſed this Foreſt and founded *Bavaria*. Hence it ſeems evident that no northern colony could have entred *Gaul* before the *Romans*. As to the *Phænicians* it does not appear that they had before that time any colonies in *Europe*, beſides thoſe of *Greece*, and on the *Mediterranean* coaſt of *Spain*, or that they had rounded *Cape Finiſtre*, or had any other footing either in *Gaul* or *Spain*; but that they received the *Britiſh* tin and other ore at *Marſeilles*, from the *Gauliſh* merchants; who brought it by ſea from the *Iſle of Wight* to the oppoſite coaſt of *Gaul*; from whence they carried it through *Gaul* on horſe-back, according to *Diodorus Siculus*, l. 5; and in which he is ſupported by *Cæſar*; but no ancient hiſtorian mentions any other trade or intercourſe between the *Phænicians*, and the *Gauls* or *Britains*; and as to any *Herculean* colonies they were of the ſame origin as the *Gauls* and *Britains*.

It ſeems unneceſſary for me to quote from *Strabo* and others that the *Tectoſages* were the original planters of the country in the neighbourhood of *Toulouſe*, extending their borders to the ocean, the *Pyrhenian Hills* and the *Mediterranean* ſhore, or that they made excurſions into *Germany*, *Denmark*, and other northern countries, and eaſtward into *Aſia Minor*; but it ſeems ſufficient to ſhew that their names prove their original ſituation; for *Volcæ* in the *Celtic* ſignifies *dwellers upon the upper borders*, and *Tectoſages*, *the upper ſide of the lower nation*; the *Gauls* being deemed the lower nations, and thoſe ancient people being ſituated on the upper borders of their country; and as they were a part of the *Gauliſh* nation, their character is to be found in *Cæſar*, *Diodorus*, *Tacitus* and others, who ſpeak of the cuſtoms, religion, and manners, of the *Gauls*; in which, *Tacitus* is to be chiefly regarded as having a better opportunity of examining into their affairs, than any other ancient writer. Now I have delivered my preſent thoughts upon this ſenſible queſtion of the learned *Tectoſages*, I would

BRITISH
MUSEUM

The Walking Leaf

For the General Magazine.

would ſubmit it to our own antiquaries, to conſider whether the tendency of it is not to prove that the *Germans*, *Danes*, and the other ancient people inhabiting from the *Rhine* to the *Baltic*, between the impenetrable *Hyrcinian*, whoſe name expreſſes *the long continued confines*, and the *German*, anciently called the *Cumbrian* Sea are deſcended from the *Gauls* or *Cumbri*. I am, admiring the loyal and general plan of your paper,

Your very humble ſervant,

ROW. JONES.

The WALKING-LEAF.

THE inſect repreſented in this plate is called, by the *Dutch*, *The Walking-leaf*, and is a kind of graſshopper. The following are my remarks upon it. My negro, whom I had ordered to bring me the worms, caterpillars, and other inſects he ſhould find in the woods, brought me one day a leaf folded up, which having carefully opened, I found in it ſome ſea-green eggs, as large as a coriander ſeed: a few days afterwards there came out of them, ſmall black inſects reſembling ants, which, as they grew bigger and bigger, took the form in which I have deſigned them; and having acquired their natural bigneſs, they began to have wings, as I have repreſented in fig. 2. They do not change into *nymphas*, as the butterflies do, but attain by growth to their natural bigneſs. Their wings, of which there are divers ſorts, reſemble a green leaf, and have the ſame fibres. Some are of a clear green, others of a browniſh green, or of a marbled and grey colour, and there are ſome of theſe inſects whoſe wings are like dry leaves. Among thoſe that are found in the *Eaſt-Indies*, there are ſeveral whoſe upper wings reſemble the leaf of a lemon-tree, both in ſhape and colour. When this inſect has acquired its natural bigneſs in its neſt, which is hung to a tree, it ſpins a web to it, in which it ſome-how wraps itſelf up; then it ſhakes itſelf violently till ſuch time as its wings, being at liberty, ſtretch themſelves out: then having got more ſtrength, it breaks the web, and either falls from the tree, or flies. Now as its wings are green, and in the form of a leaf, ignorant people think that theſe inſects come out of the tree from whence they fall.

To fill the plate, I have deſigned a kind of foreſt rat, which carries its young ones upon its back, and has generally five or ſix at a litter. It is of a yellowiſh brown, and its belly is white. When it goes out of its hole to ſeek for food, its young ones follow; and when they have done eating, or are afraid of any thing, they leap upon their mother's back, faſten their tails to her's, and in this manner ſhe carries them back into her hole.

There are ſeveral kinds of theſe rats but the principal is that which the *Dutch* call *de Zak-rot*, or *Beurs-rot*. The females carries her young ones under her belly, from whence they crawl out to ſeek for food, and afterwards go in again.

MEMOIRS *of the Rev. Mr.* CHARLES CHURCHILL.

IT has been often remarked, that the life of an hero could not be written with candour till envy or adulation ſlept with him in the grave; and that thoſe actions only become the object of hiſtory, which it was not in the power of ſucceeding miſconduct to tarniſh.

Mr. Charles Churchill was the ſon of the Rev. Mr. Charles Churchill, curate and lecturer of St. John's in Weſtminſter; he was alſo educated in Weſtminſter-ſchool, and received ſome applauſe for his abilities from his tutors in that famous ſeminary. His capacity, however, was greater than his application, ſo that he received the character of a boy who could do good if he would. As the ſlighteſt accounts of perſons ſo noted are agreeable, it may not be amiſs to obſerve, that having one day got an exerciſe to make, and from idleneſs or inattention, having failed to bring it at the time appointed, his maſter thought proper to chaſtiſe him with ſome ſeverity, and even reproach his ſtupidity: what the fears of ſtripes could not effect, the fear of ſhame ſoon produced, and he brought his exerciſe the next day, finiſhed in ſuch a manner, that he received the public thanks of all the maſters.

Still, however, it is to be ſuppoſed that his progreſs in the learned languages was but ſlow; nor is it to be wondered at, if we conſider how difficult it was for a ſtrong imagination, ſuch as he was poſſeſſed of, to conform and walk tamely forward in the trammels of a ſchool education: minds like his are ever ſtarting after new purſuits, deſirous of embracing a multiplicity of amuſing objects, eager to come at the end without the painful inveſtigation of the means; and, if we may borrow a term from the mercantile world, a genius like his, diſdaining the painful aſſiduity of earning knowledge by retail, aimed at being a wholeſale dealer in the treaſures of literature. Thus much was neceſſary to premiſe, in order to palliate his being refuſed admittance into the univerſity of Oxford, to which he was ſent by his father, for want of proper ſkill in the learned languages. He has often mentioned his repulſe upon that occaſion; but whether his juſtification of himſelf is to be admitted, we will not undertake to determine. Certain it is, that both he and his companions have often aſſerted, that he could have anſwered the college examination had he thought proper; but he ſo much deſpiſed the trifling queſtions that were put to him, that inſtead of making the proper replies, he only launched out in ſatirical reflections upon the abilities of the gentleman whoſe office it was to judge of his.

Be this as it will, Mr. Churchill was rejected from Oxford, and probably this might have given occaſion to the frequent invectives we find in his works againſt that moſt reſpectable univerſity. Upon his returning from Oxford, he again applied to his ſtudies at Weſtminſter-ſchool; and there, at the age of ſeventeen contracted an intimacy with the lady to whom he was married, and who ſtill ſurvives him. This was one of thoſe imprudent matches which generally begin in paſſion and end in diſguſt. However, the beginning of this young couple's regard for each other were mutual and ſincere, and ſo continued for ſeveral years after. At the uſual age for going into orders, Mr. Churchill

Churchill was ordained by the late biſhop of London, notwithſtanding he had taken no degree, nor ſtudied in either of our univerſities; and the firſt place he had in the church, was a ſmall curacy of 30l. a year in Wales. To this remote part of the kingdom he brought his wife; they took a little houſe, and he went through the duties of his ſtation with chearfulneſs and aſſiduity. Happy had it been for him in this life, perhaps more happy in that to which he has been called, if he ſtill had continued here in piety, ſimplicity and peace. His pariſhioners all loved and eſteemed him; his ſermons, though rather raiſed above the level of his audience, were however commended and followed. In order to eke out his ſcanty finances, he entered into a branch of trade which he thought might end in riches, but which involved him in debts that preſſed him for ſome years after; this was no other than keeping a cyder cellar, and dealing in this liquor through that part of the country. A poet is but ill qualified for merchandize, where ſmall gains are to be patiently expected, and carefully accumulated. He had neither patience for the one, nor œconomy for the other; and a ſort of rural bankruptcy was the conſequence of his attempt.

Upon leaving Wales, he came up to London; and his father ſoon after dying, he ſtept into the church in which he had officiated. In order to improve his ſcanty finances, which, in this ſituation, did not produce full an hundred pounds yearly, he undertook to teach young ladies to read and write Engliſh, and was employed for this purpoſe in the boarding-ſchool of Mrs. Dennis, where he behaved with that decency and piety which became his profeſſion.

While Mr. Churchill was in this ſituation, his method of living bearing no proportion to his income, ſeveral debts were contracted in the city, which he was not in a capacity of paying; and a gaol, the continual terror of indigent genius, ſeemed now ready to cloſe upon his miſeries. From this wretched ſtate of uneaſineſs he was relieved by the benevolence of Mr. Lloyd, father to the poet of that name, who ſatisfied his creditors.

In the mean time, while Mr. Lloyd, the father, was thus relieving Churchill by his bounty, Mr. Lloyd the ſon began to excite him by his example. The actor, a poetical epiſtle, written by this gentleman, and addreſſed to Mr. Bonnel Thornton, was read and reliſhed by all the judges of poetical merit, and gave the author a diſtinguiſhed place among the writers of his age. Mr. Churchill ſoon undertook to write the Roſciad, a work though upon a more confined plan, yet was more adapted to excite public curioſity. It firſt came out without the name of the author; but the juſtneſs of its remark, and particularly the ſeverity of the ſatire, ſoon excited public curioſity. Though he never diſowned his having written this piece, and even openly gloried in it; yet the public, unwilling to give ſo much merit to one alone, aſcribed it to a combination of wits; nor were Meſſrs. Lloyd, Thornton, or Coleman, left unnamed upon this occaſion. This miſplaced praiſe ſoon induced Mr. Churchill to throw off the maſk, and the ſecond edition appeared with his name at length; and now the fame, which before was diffuſed upon many objects, became centered to a point. As the Roſciad was the firſt of this poet's performances, ſo many are of opinion that it is his beſt;

beſt; and, indeed, I am inclined to concur, in the ſame ſentiment. In it we find a very cloſe and minute diſcuſſion of the particular merit of each performer; their defects pointed out with candour, and their merits praiſed without adulation. This poem, however, ſeems to be one of thoſe few works which are injured by ſucceeding editions: when he became popular, his judgment began to grow drunk with applauſe; and we find, in the latter editions, men blamed whoſe merit is inconteſtable, and others praiſed that were at that time in no degree of eſteem with the judicious, and whom at preſent even the mob are beginning to forſake.

His next performance was his apology to the critical reviewers: this work is not without its peculiar merit; and as it was written againſt a ſet of critics, whom the world was willing enough to blame, the public read it with their uſual indulgence. In this performance he ſhewed a peculiar happineſs of throwing his thoughts, if we may ſo expreſs it, into poetical paragraphs; ſo that the ſentence ſwells to the break or concluſion, as we find in proſe.

His fame being greatly extended by theſe productions, his improvement in morals did not ſeem by any means to correſpond; but while his writings amuſed the town, his actions in ſome meaſure diſguſted it. He now quitted his wife, with whom he had cohabited for many years, and reſigning his gown, and all clerical functions, commenced a complete man of the town, got drunk, frequented ſtews, and giddy with falſe praiſe, thought his talents a ſufficient atonement for all his follies.

In ſome meaſure to palliate the abſurdities of his conduct, he now undertook a poem called Night, written upon a general ſubject indeed, but upon falſe principles, namely, that whatever our follies are, we ſhould never undertake to conceal them. This, and Mr. Churchill's other poems, being ſhewn to Mr. Johnſon, and his opinion being aſked concerning them, he allowed them but little merit; which being told to the author, he reſolved to requite this private opinion with a public one. In his next poem therefore of the Ghoſt, he has drawn this gentleman under the character of Pompoſo; and thoſe who diſliked Mr. Johnſon, allowed it to have merit; but our poet is now dead, and juſtice may be heard without the imputation of envy; though we entertain no ſmall opinion of Mr. Churchill's abilities, yet they are neither of a ſize nor correctneſs to compare with thoſe of the author of the Rambler; a work which has, in ſome places, enlarged the circle of moral enquiry, and fixed more preciſe land-marks to guide philoſophy in her inveſtigation of truth. Mr. Johnſon's only reply to Mr. Churchill's abuſe was, that he thought him a ſhallow fellow in the beginning, and that he could ſay nothing worſe of him ſtill.

The poems of Night, and of the Ghoſt, had not the rapid ſale the author expected; but his prophecy of Famine ſoon made ample amends for the late paroxyſm in his fame. Night was written on a general ſubject, and for that reaſon no way alluring; the Ghoſt was written in eight ſyllable verſe, in which kind of meaſure he was not very ſucceſsful; but the prophecy of Famine had all thoſe circumſtances of time, place, and party to recommend it, that the author could deſire; or, let us uſe the Words of Mr. Wilks, who ſaid, before its publication, that he was ſure it muſt take, as it was at once perſonal, poetical, and political.

political. It had accordingly a rapid and extenſive ſale; and it was often aſſerted by his admirers, that Mr. Churchill was a better poet than Mr. Pope. This exaggerated adulation, as it had before corrupted his morals, now began to impair his mind; ſeveral ſucceeding pieces were publiſhed, which being written without effort, are read without pleaſure. His Gotham, Independence, The Times, ſeem merely to have been written by a man who deſired to avail himſelf of the avidity of the public curioſity in his favour, and are rather aimed at the pockets than the hearts of his readers.

How ſhall I trace this thoughtleſs man through the latter part of his conduct; in which, leaving all the milder forms of life, he became entirely guided by his native turbulence of temper, and permitted his mind to harraſs his body through all the various modes of debauchery? Yet let us not be ſevere in judging: happy were it for him, perhaps, if ours were the only tribunal at which he was to plead for thoſe irregularities, which his mental powers rendered but more culpable.

Memoirs of the late Mr. WILLIAM HOGARTH.

THE ingenious man who makes the ſubject of this ſlight memoir, was one of thoſe, whoſe life affords little variety to the hiſtorian, and whoſe chief hiſtory lies in that of his own productions. But not to be entirely ſilent upon a ſubject which affords more to raiſe than gratify curioſity, we may obſerve, that Mr. Hogarth was born in London, in the pariſh of St. Bartholomew; to which he was afterwards, as far as lay in his power, a benefactor.

His father, being of one the lower orders of tradeſmen, had no higher views for his ſon than binding him apprentice to an engraver of pewter pots, which, it muſt be owned, is, of all the ſpecies of the painting art, the loweſt. In this humble ſituation Hogarth wrought through his apprenticeſhip, and ſeemed, through the whole of his time, to have no higher views than thoſe of his contemptible employment.

Upon leaving his apprenticeſhip, he reſolved upon higher aims, and purſued every method of improving himſelf in the art of drawing, of which his former maſter had given him but a very rude conception. The ambition of the poor is ever productive of diſtreſs; ſo it was with Hogarth, who, while he was furniſhing the materials for his ſubſequent excellence, felt all that contempt and indigence could produce. I have heard it from an intimate friend of his, that being one day arreſted, for ſo trifling a ſum as twenty ſhillings, and being bailed by one of his friends, in order to be revenged of the woman who arreſted him (for it was his landlady,) he drew her picture as ugly as poſſible, or, as painters expreſs it, in *caricatura*; and in that ſingle figure gave marks of the dawn of ſuperior genius.

How long he continued in this ſtate of indigence and obſcurity, I cannot learn; but the firſt piece in which he diſtinguiſhed himſelf as a painter, was in the *Figures of the Wandſworth Aſſembly*. Theſe are drawn from the life, and without any circumſtances of his burleſque manner. The faces are ſaid to be extremely like, and the colouring is rather better than in ſome of his beſt ſubſequent pieces. But we muſt obſerve in general of this ex-

cellent painter, that his colouring is dry and diſpleaſing, and that he could never get rid of that appellation of a *manriſt*, which was given him early in life. His next piece was probably that excellent picture of the *Pool of Betheſda*, which he preſented to St. Bartholomew's hoſpital, in which pariſh, as we have already ſaid, he was born.

We have hitherto only ſeen him in grave hiſtory paintings; a walk in which he has many competitors; but he ſoon launched out into an unbeaten track, in which he excelled all that ever came before, or have ſince ſucceeded him. His being firſt employed to draw deſigns for a new edition of Hudibras, was the inlet to his future excellence in the burleſque. We mean in his life pictures, for ſuch we will venture to call them. It is unjuſt to give theſe the character either of burleſque or groteſque pieces, ſince both the one and the other convey to us a departure from nature, to which Hogarth almoſt always ſtrictly adhered. That work of this kind, which firſt appeared was his *Harlot's Progreſs*. The ingenious Abbe du Bos has often complained, that no hiſtory painter of his time went through a ſeries of actions, and thus, like an hiſtorian, painted the ſucceſſive fortunes of an heroe from the cradle to the grave. What du Bos wiſhed to ſee done, Hogarth performed. He launches out his young adventurer a ſimple girl upon the town, and conducts her through all the viciſſitudes of wretchedneſs to a premature death. This was painting to the reaſon and to the heart: none had ever before made the art ſubſervient to the purpoſes of morality and inſtruction; a book like this is fitted to every ſoil and every obſerver, and he that runs may read.

The *Rake's Progreſs* ſucceeded the former, which, though not equal to it, yet came ſhort only of that ſingle excellence, no other could come near him in that way. His great excellence conſiſted in what we may term the furniture of his pieces; for as in ſublime ſubjects, and hiſtory pieces, the fewer little circumſtances there are to divide the ſpectator's attention from the principal figures, is reckoned a merit; ſo in life painting, the greater variety there is of thoſe little domeſtic images, it gives the whole a greater degree of force and reſemblance. Thus in the *Harlot's Progreſs* we are not diſpleaſed with James Dalton's wig-box on the bed teſter in her lodgings in Drury-lane; particularly too if it be remembered that this James Dalton was a noted highwayman of that time. In the pieces of *Marriage Alamode*, what can be more finely or ſatyrically conceived than his introducing a gouty lord, who carries his pride even into his infirmities, and has his very crutches marked with a coronet.

But a comment or panegyric on pictures is of all ſubjects the moſt diſpleaſing; and yet the life before us ſcarce offers little elſe. We may indeed, in the manner of biographers, obſerve that he travelled to Paris for improvement; but ſcarce any circumſtance remains by which he was diſtinguiſhed in this journey from the reſt of mankind who go thither without deſign, and return without remark. Perhaps his general character of the French may be thought worth remembering; which was, that their houſes were *gilt and b—t*.

About the year 1750 he publiſhed his *Analyſis of beauty*, which, though it was ſtrongly oppoſed, yet was replete with thoſe ſtrokes which ever

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ever characteriſe the works of genius. In this performance he ſhews, by a variety of examples, that round ſwelling figures are moſt pleaſing to the eye; and the truth of this has of late been further confirmed by an ingenious writer on the ſame ſubject.

Little elſe remains of the circumſtances of this admirable man's life, except his late conteſt with Mr. Churchill: the circumſtances of this are too recent in every memory to be repeated. It is well known that both met at Weſtminſter-hall; Hogarth, to catch a ridiculous likeneſs of the poet; and Churchill to furniſh a natural deſcription of the painter. Hogarth's picture of Churchill was but little eſteemed, and Churchill's letter to Hogarth has died with the ſubject: ſome pretend, however to ſay, that it broke the latter's heart; but this we can, from good authority, ſay is not true; indeed, the report fails of itſelf; for we may as well ſay that Hogarth's pencil was as efficacious as the poet's pen, ſince neither long ſurvived the conteſt.

The CAYMAN.

THE animal repreſented in this plate is a Crocodile of Surinam, which is called Cayman in the Eaſt-Indies. It is very ſtrong, and formidable to men, as well as to land and water animals; for it lives both by land and water, and devours every thing it meets. It proceeds from an egg as large as that of a gooſe; and it is ſurprizing, how, coming out of ſo ſmall a ſhell, it grows in ſo little a time ſeven or eight times larger than the egg it proceeds from.

I have repreſented in the plate one of the eggs open behind the animal. Though it is ſo ſmall at firſt, it grows the largeſt of the oviparous animals, ſince there are ſome above twenty feet long. It's feet, back, and tail are covered with very hard ſcales; ſo that they render him invulnerable; but the ſkin under his belly is ſo tender, that he can be eaſily killed by ſtriking it in that part. Its greateſt ſtrength conſiſts in a double row of teeth, which grow one upon another, ſo that it ſoon devours its prey. It runs very faſt, but always in a ſtrait line; and if it were able to turn about on either ſide, nothing could eſcape it. It cannot move its lower jaw, but only the upper one, which is remarkable in no other animal.

There are ſeveral ſorts of vipers which proceed from eggs, like the crocodile; but their eggs are much ſmaller. I have repreſented one in the plate under the head of this viper, which is commonly called *Amphiſbæna*, or two headed, becauſe its head and tail are exactly alike. Yet it is not true, that it has two heads; for one may eaſily diſtinguiſh the eyes and mouth at the extremity where the head is, which is not found at the other, which is indeed the tail. This viper is of the moſt beautiful colour, it being ſpeckled with black, crimſon, and yellow. There is another kind of vipers that are grey, yellow, and brown.

A deſcription of the famous city of Damaſcus, *the capital of* Syria, *in its preſent ſtate.*

THE city of Damaſcus is encompaſſed with walls extending about two miles from eaſt to weſt, and a mile and a half from north

north to ſouth; but the ſuburbs are much larger than the city. In one of theſe, they have an open place for riding and other exerciſes. The river Barrady, and two or three ſtreams of water that are brought from it, run through ſeveral parts of the city. Damaſcus does not anſwer within to its outward appearance; the ſtreets being all narrow, there is a foot-way on each ſide of them, and a lower-way in the middle for horſes and cattle, juſt large enough for one beaſt, and which ſerves alſo to carry off the water after rain. Moſt of the houſes are built, for a few feet from the foundation, with hewn ſtone, the reſt with unburnt brick; their palaces are very magnificent within, and are built round a court, but make no manner of appearance without, and it is very rare that more than a dead wall is ſeen from the ſtreets. The bazars, or ſhops, make a better appearance, which have wide ſtreets between them, and many of them are only open to foot people; they are covered at top with roofs or arches, which are a ſhelter from the ſun, and keep them cool. They have water in ſuch abundance at Damaſcus, that all parts are ſupplied with it, and every houſe has either a fountain, a large baſon of water, or at leaſt a pipe or conduit.

There are a great number of moſques in Damaſcus, ſome of which were formerly churches, particularly the principal moſque, which was the cathedral church: This building, with the avenues and edifices belonging to it, is one of the fineſt things that the zeal of the firſt chriſtians produced, for by its architecture it appears to have been built before that art was loſt, being all of the Corinthian order, and very well executed. There are ſeveral hoſpitals in and about the city; but the Turkiſh charity is not a ſettled maintenance for the poor and ſick, except for ſuch people as have not their ſenſes, for whom they have a particular regard; but their charity conſiſts in giving victuals to the poor once or twice a week, and ſometimes in diſtributing medicines to the ſick on certain days: they have indeed an hoſpital for the maintenance of lepers at a moſque; but the fineſt hoſpital is to the weſt of the city, and was founded by ſultan Selim the ſecond.

The coffee-houſes in Damaſcus are remarkably pleaſant; many of them are large rooms, and their cielings are ſupported with rows of pillars, round which they have their ſophas; there is generally a court behind them with a baſon of water, and a fountain in the middle, and the ſeats round the courts are either ſhaded with trees, or covered over; one in particular on the river, has an iſland behind it, planted with trees, and the place is accommodated in a very convenient manner, which renders it one of the moſt delightful places that can be imagined in the midſt of a great city. In theſe coffee-houſes they have concerts of muſic at a certain hour every day; and in ſome, a perſon, paid by the hour, tells, at a fixed hour Arabian ſtories, in a very graceful manner and with much eloquence. Theſe coffee-houſes anſwer the end of public-houſes, with thoſe who openly drink nothing but water, coffee, and ſherbets; where all idle people, ſtrangers and others, who are not of the firſt rank, paſs their leiſure hours, ſend to the ſhops for proviſions, and take their repaſts; the people from without carrying about their different ſorts of ſherbet, for which the place is famous.

Damaſcus is likewiſe famous for its gardens; and whatever is beautiful in them is owing chiefly to the great command there is of water; they

they afford a very fine proſpect from a height at a ſmall diſtance, on account of the great variety of their trees. The eaſtern gardens in general are only orchards, or woods of fruit-trees, not regularly diſpoſed, and only laid out in narrow walks; there are ſeveral ſmall ſtreams brought through them, and ſome of them are beautified with baſons of water in open pavilions, or with fountains and little water-works; in which, and in pleaſant ſummer-houſes, their chief beauty conſiſts. In theſe gardens the people often ſpend their whole day, and there are always ſome to be let for that purpoſe, in which the gueſts are at liberty to eat what fruit they pleaſe; and thoſe who have houſes in their gardens, frequently retire to them for two or three days in the ſummer.

The paſha of Damaſcus reſides in this city, which, together with the country round it, pretends to have had the ſame privileges that Egypt enjoys at preſent; ſo that it is a difficult government. The paſha has a troop of Boſniacs, which he changes often, that they may not contract friendſhips; he has alſo a body of men, who are natives of the coaſt of Barbary, to defend him againſt the populace in caſe of inſurrections; for there have been inſtances of their driving the paſha out of the city; and on his return from Mecca they have refuſed to admit him with theſe ſoldiers; for the paſha of Damaſcus conducts the caravan that goes yearly from Damaſcus to Mecca. Here is alſo a body of janizaries under their aga; out of theſe they take what they call the capicules, who are guards of the gates of the city, each of them having a gate allotted to him, and a certain diſtrict near it, over which he has a ſort of abſolute power.

The patriarch of Antioch ordinarily reſides here, who was choſe at Aleppo, and has under him forty-two archbiſhops and biſhops. This patriarchate is worth forty purſes a year. It is computed that there are twenty thouſand Chriſtians at Damaſcus, Maronites, Jacobites or Syrians, Armenians and Greeks; of the Greeks, eight thouſand acknowlege the pope, and think it a ſin to go to the eſtabliſhed Greek church, and are not permitted by the paſha either to go to the Latin church, or to have a ſeparate congregation for themſelves; but they have ſome prieſts of their own perſuaſion, who, together with the Latins, go privately to their houſes and confeſs them. The Chriſtians of Damaſcus have a very bad character, and it is ſaid they have all the vices of the Turks, only with this difference, that they are more aſhamed of them; and many of them are ſad examples, that they were Chriſtians only in name; having turned Mahometans either to avoid a puniſhment, or to have an opportunity of revenging themſelves on ſome Chriſtians who had uſed them ill; and there are generally ſix or ſeven inſtances of this kind every year. As the chriſtians here are worſe than in any other parts, ſo the Turks alſo indulge thoſe vices here to the greateſt degree, for which they are generally infamous; with many, drinking wine takes the place of opium, but they are generally ſecret in the practice. The *Damaſcenes* are much addicted to pleaſure, and love to paſs their Time in a lazy, indolent manner. They do not want parts. They have moſt of them fine black eyes, and when children, are of moſt ſurpriſing fairneſs and beauty; but by the heat, their vices, the great uſe of the bagnio, and the cuſtom of wearing their

beards

beards, they loſe that comlineſs in their years of maturity; but it is ſaid their women are the moſt beautiful in the world. The Damaſcenes uſe much ſnow in all their liquors; they bring it in great quantities from the neighbouring mountains, it is ſaid to the amount of ſixty aſs-loads every day. The wine about this city is ſtrong and good, generally of the colour of Burgundy. They have plenty of all ſorts of proviſions excellent in their kinds, and fruits in the greateſt perfection.

The trade of Damaſcus, as to import, conſiſts of the merchandizes of Perſia and India, which the caravan brings yearly from Mecca, and of cloth, glaſſes and ſmall wares from Europe. The manufactures they export are chiefly burdets of ſilk and cotton, plain ſilks like tabbies, and cutlery wares, for which they are very famous, and which they finiſh in the greateſt perfection. It is ſaid their cutlaſſes will enter common Iron without hurting the edge. The cutlery and ſilverſmith's trades are carried on by the Chriſtians, as the latter is in moſt places.

Account of the New Comic Opera, The GUARDIAN OUTWITTED.

THIS piece opens with Roger's acquainting the audience (by talking to himſelf) that he is valet to lord Planwell, has made the tour of Europe with his maſter, and is now placed as a footman in the houſe of Flirtilla, a young lady of fortune his lord is enamoured with, to be a ſpy upon her actions. The lady's maid entering, he finds her to be Dolly Pinup, an old ſweetheart of his, and renews his love with her, but is interrupted by Maukin, a country wench, the houſe maid, who, taken by his ſmart appearance, had reſolved to throw herſelf in his way to attract his notice. Slouch, another footman, enters with a letter from a French Marquis to be delivered to Flirtilla, for which he has received the bribe of one guinea, and brought five more to Pinup, who takes both purſe and letter. Maukin returns the courtſhip of her old friend Slouch with diſdain, and leaves him to ſing his grief before he goes out. At his departure Roger and Pinup come forward, and we find that Sir Liquoriſh Trapgold, the guardian, and a French Marquis are the rivals to lord Planwell. We are next tranſported to my lord's houſe, where he appears with Sir Britiſh Blunt, a downright Engliſhman, who is in love with my lord's ſiſter, lady Julia, to whom the French Marquis, La Fineſſe, pays his addreſſes, and ſeems to have her vanity ſtruck by the gaiety of the Frenchman's appearance, who comes to pay a morning viſit to my lord. The peer had adviſed his friend, to attack his ſiſter with ſpirit; to kiſs her, teaſe her, and treat her like a mortal woman compoſed of fleſh and blood, while the Marquis with diſtant awe, approaches his mock divinity. This advice Sir Britiſh follows, he kiſſes lady Julia, and when the Marquis offers to embrace him, ſays, "Sincerity is our characteriſtic; the right hand is the bond of friendſhip with the men; and our lips the ſeals of love with the ladies." After both the lovers have diſplayed their ſeveral manners of foreign fawning, and Engliſh bluntneſs, the Marquis accompanies the lady to go to an auction, and leaves my lord to talk to his friend of his miſtreſs Flirtilla, whoſe pretended fondneſs for her guardian Sir Liquoriſh Trapgold can only be a deſign to wheedle him out of money. The

next

next ſcene ſhews Flirtilla, who wonders ſhe has riſen ſo ſoon as ten o'clock, and relates her having loſt all her money but twelve guineas, and a bank-note of 30l. reſolves to wheedle Sir Liquoriſh out of more by ſome probability of the ſtocks riſing; the old gentleman comes very opportunely, and ſhe amuſes him with the ſtory that the Cham of Tartary had contracted with the Eaſt India Company to remit three millions in ſpecie, in exchange for ſheep ſkins, and aſks him to advance her a thouſand pounds; which he promiſes ſhe ſhall have if ſhe will diſcharge his rival lord Planwell; this ſhe promiſes, and he goes out to go to his banker; Flirtilla, who is a finiſhed coquet, pleaſes herſelf with the imagination of her future enjoyment of every faſhionable pleaſure when ſhe is lady Planwell, if ſhe could contrive to get her fortune out of her guardian's hands, which he is not obliged to pay till ſhe is at age, to which four years are wanting; ſhe then goes to her dreſſing room. Pinup gives her the Marquis's letter (for he, though already a ſuitor to lady Julia, we find deſigns to try his fortune with her) and he immediately comes to pay her a viſit; he is ordered into the parlour, where ſhe waits upon him. He makes her an immediate offer of his love, and is kneeling at her feet, when lady Julia enters, and ſurprizes him; ſhe upbraids him, and he excuſes himſelf by declaring he was only intreating her to bear a part with him in a favourite duet, which he produces, and lady Julia deſires they will perform it, declaring it was only a ſudden alarm of pride, and not of love, that had affected her. The Marquis and Flirtilla ſing the duet ſo affectingly, that they ſink into each other's arms juſt as lord Planwell and Sir Britiſh enter, and the five lovers expreſs their rage in a very fine quintette, which ends this act.

The ſecond act begins with Roger, who is ſtruck with the charms of Maukin, and *very morally* reſolves, in imitation of his betters, to have an intrigue with one woman while he is honourably addreſſing another, and goes out for that noble purpoſe. Pinup enters with Slouch, and two chairmen whom ſhe ſends with cards to invite company, to a rout in miniature; ſhe then gives Slouch the bank note to get changed, and aſking for the cook to draw a bill of fare for ſupper, Slouch declares he can draw a bill of fare as well as any cook in England; he propoſes a ſhoulder of mutton for the top diſh, eggs and bacon on the right, and a plumb-pudding on the left, a briſket of beef with cabbage and carrot, and a diſh of beans and bacon. He is proceeding, when Pinup perceives he has torn the bank note to pieces to mark out the poſition of the diſhes on the floor; and in great grief picks them up to paſte them on another paper with flour and water. The next ſcene is Roger making love to Maukin, caught together by Pinup; their quarrel and reconciliation. Lord Planwell and Sir Britiſh appear next, having received letters from their ladies, which had ſet all to rights: by their diſcourſe we find that Sir Liquoriſh had a wife ſtill living in Spain, though he had thought her dead, and who had been a caſt miſtreſs of Sir Britiſh; that ſhe had juſt ſent a letter, wherein was incloſed an after clauſe to the will of Flirtilla's father, by which her guardian was to pay her whole fortune of 70,000l. on the day of marriage, if it was to a peer, and that the writing was witneſſed by her brother, who was then a lieut. at Martinico; but as lieut. Sprightly was not in England to

give his evidence, they think of ſubſtituting Roger in his room. We next ſee La Fineſſe and Flirtilla at cards; he has won ſix hundred pounds of her at piquet, which ſhe not having to give him, he with the greateſt inſolence deſires her to balance the debt with her beauty, which (on his departure) throws her into a fit of reflection on her indiſcretion, and into a reſolution of "forſaking every deceitful pleaſure, that carries a ſting in its conſequence, which produces the following very pretty air.

A I R.

From aſſaults on tempting beauty,
Timely fly ye cautious fair;
Join an inward ſenſe of duty
To an outward modeſt air;
Thoſe like watchful guards attend us,
When licentious foes are near;
Theſe from inſults baſe defend us,
Striking vice with awe and fear.

Sir Liquoriſh enters to her, and her playing upon his fears of lord Planwell, his cowardice, and her wheedling had great effect upon the galleries. On their going out, Roger (who had been liſtening) appears to expreſs his doubt of the Marquis being really what he pretended, and reſolves to ſet Slouch to bribe the Marquis's valet; when Pinup enters, and preſently after lord Planwell, who ſeems to have the ſame *moral deſign* with his valet, of intriguing with one, while he makes honourable love to another; they go together as into the parlour; Roger remains, full of jealouſy, opens the door to Flirtilla and Sir Liquoriſh, and ſends them immediately into the parlour, where they find my lord laying cloſe ſiege to Pinup. An angry duet enſues, and then an ambiguous air by Flirtilla, which at the ſame time it ſhews her love for my lord, by the equivocal uſe of the word guardian throws him into the higheſt rage; Sir Britiſh and lady Julia enter to them, and the act concludes with a quintette in the burletta ſtile.

Lord Planwell, Sir Britiſh, and lady Julia, open the laſt act. My lord now perceives that her ſole intent was to wheedle Sir Liquoriſh out of money to pay her loſſes to La Fineſſe, of which he had been informed by Roger, who then enters in regimentals. Flirtilla comes to viſit Julia, and a reconciliation is made between her and my lord, in the uſual manner of comedies, and on her exit, a little more love chat follows between Sir Britiſh and lady Julia, who wiſhing him to poliſh his rugged manner, ſays, "I cannot ſigh, pine and languiſh, nor ſwear I die for beauty, when I only live for it; but ſhew me one quality in the Marquis that would become a Briton, and I'll copy it immediately." The air with which he cloſes the ſcene (after her departure) is very delicate, and is as follows.

A I R.

In women, as in gardens fair,
But weed the grateful ſoil;
The bloſſom, virtue, will appear
To crown the glorious toil.
And when the charms of Flora yield,
To time their rich perfume;
Bright virtue then will brave the field,
In never fading bloom.

We are next preſented with a quarrel between Slouch and Maukin, in Flirtilla's garden; in which, with great innocence, ſhe acknowledges her liking for Roger. Slouch tells her he was Pinup's ſuitor before, and goes out, after ſinging the following air, in which, words, tune and action were happily united with equal merit.

AIR.

AIR.

Women, like creditors baſe,
Spread out a cloſe woven net;
And run, with a promiſing face,
A world of love in your debt.
Smile, fawn, lie,
Puffing their honour and honeſty,
Then fly, fly,
Laughing to ſee how we're bit.

Plague on your counterfeit innocence,
Prim double face, and mock modeſty,
Worn but to cover your impudence,
Sureſt art to deceive.
Make other blockheads your martyrs,
For I'll come no more to your quarters,
The devil provide you with garters,
To hang without a repriewe.

When Slouch is gone out, Pinup enters, and having told Maukin that Roger had been contracted to her before his going abroad, the innocent girl promiſes to think no more of him, but return to Slouch. Flirtilla and lady Julia are next preſented, who are acquainted of Roger's transformation into a lieutenant by a letter from my lord; and Flirtilla is aſſured of La Fineſſe's unworthineſs by a letter from him, appointing a meeting at a milliner's. Sir Liquoriſh comes in with the bank notes, which he cunningly refuſes to give her, unleſs ſhe will ſign a bond of 70,000l. penalty to marry him in three days time; this ſhe rejects with ſcorn, and Lord Planwell and Sir Britiſh bringing Roger in as capt. Sprightly, the guardian is ſhewn the copy of the after-clauſe, and a letter from his wife, who is ſtill living in Spain; on which he gives the notes, and promiſes to pay her fortune to my lord. La Fineſſe coming in, is known by Roger to be one Brender, a Swiſs ſharper, who had before cheated him of 60 ducats, by falſe cards and loaded dice; and his being an impoſter is confirmed by Sneider, his own valet. The lady thereby ſaves the 600l. and the marquis is permitted to depart, on his promiſe to quit the kingdom in three days; The two couples are happily united, Roger is rewarded with Pinup, and a farm of forty-acres of land, in fee ſimple; and the opera concludes with an epithalamium and a chorus.

This piece, the author informs us, is the fifth he hath wrote, though the firſt offered to the public; and we wiſh we could ſay more in its favour, agreeable to juſtice and candid criticiſm. Notwithſtanding his boaſt of having but one incident which takes from the originality of this comedy, namely, Slouch's tearing the bank-note from Goldoni; yet we can ſcarce find one original character in the piece. Sir Britiſh Blunt, is Manly in the Provoked Huſband; Sir Liquoriſh and Flirtilla, are Sir Francis Gripe and Miranda, in the Buſy Body; Roger and Pinup are counter-parts of Tom and Phillis, in the Conſcious Lovers: La Fineſſe is a very common character, only the odium is taken from the French to be thrown upon the Swiſs, perhaps the moſt honeſt ſett of people in general now exiſting. And as for the neceſſity of ſeveral of the characters, any perſon may judge, that if that Maukin and Slouch, with the whole of Roger, in the two firſt acts, and part of the third, with near all of Pinup, were omitted, the plot would not have ſuffered. Let us next examine with what conſiſtence the characters are ſuſtained. It is a great pity that the heathen deities are not entirely excluded from thoſe pieces where the ſcene is laid in any part of Chriſtendom, ſince the introducing their names (except ſometimes in metaphor, where they are familiarized to us) is highly abſurd. Sir Britiſh

Blunt, a downright honeſt ſenſible gentleman, addreſſes himſelf to Venus in an abſolute hymn (and ſuch, no doubt, the compoſer took it to be, by ſetting it to a ſolemn piece of muſic). The words are,

AIR,

Daughter fair of mighty Jove,
Source of pleaſure, Queen of Love,
Thy influence we court;
While on the ſtream of hope we glide,
Direct the wind, becalm the tide,
And bring us ſafe to port.

Nay, ſuch very pagans are lord Planwell and Flirtilla, that they conclude a duet with this addreſs;

Ye Gods, *who of mortals pretend to the care,*
Or leſſen my pain, or give patience to bear,

Sir Liquoriſh Trapgold is not repreſented as a fool; he has been, we find, a merchant at Liſbon, and it is highly ridiculous to ſuppoſe him to be ſuch an errant aſs, as to ſwallow Flirtilla's ſtory of the Cham of Tartary ſending three millions for ſheep-ſkins. Beſides, his ready giving up of his guardianſhip on the ſight of the copy of a clauſe, atteſted only by *one* witneſs, and bullied by a mock officer, is not conſiſtent with the prudence or cunning of a merchant of 65.—La Fineſſe ſpeaks in broken Engliſh, and his duet with Flirtilla is written partly in the ſame jargon; yet his firſt air which begins,

When from beauty ſweetly blooming,

is downright good Engliſh, and ſung accordingly. The whole merit of this piece (which by the introduction of ſeveral unneceſſary ſcenes and uſeleſs characters, is made inſufferably long) conſiſts in the airs, which in general are very pretty, well adapted, harmonious, and delicate (except that of Roger, in the firſt ſcene of the ſecond act) and ſhows that, however the author is cenſurable in the dramatic, he is a very good lyric poet.

To point out all the beauties in Dr. Arne's muſic, would be an endleſs taſk. The overture was fine, and the air therein, in the Scotch taſte, was excellent and delicate. The airs were all very expreſſive of the different paſſions, well adapted, and in character, with pleaſing variety; and the applauſe he received was very great, and juſtly merited.

The performance was good. Mr. Mattocks was very juſt in lord Planwell. Mr. Beard repreſented the true Briton with great ſpirit. Mr. Shuter and Mr. Dunſtall, in their characters of Sir Liquoriſh Trapgold, and Slouch, were full of true humour. Mr. Dyer entered entirely into the ſpirit of Roger; and the character of La Fineſſe was not in the leaſt injured by Mr Squibb's performance. Miſs Brent was very great in Flirtilla; only we would recommend to that lady's conſideration, whether in the air which begins,

Then how I'll jaunt it,

to ſtick to the words of the author, and not introduce the pretty little ſpeeches, which are not in her part, would not be better received; and alſo, not to call *giggle*, in the ſame ſong, *jiggle*. Miſs Hallam in lady Julia, and Miſs Miller in Pinup, were very well received, and not only ſung but played their parts with great propriety. The part of Maukin was performed by miſs Wainwright (being her firſt appearance on the ſtage.) We could wiſh to hear her in ſome other character, for the country dialect, proper to her part, was ſo well expreſſed, that we muſt have the warrant out of our own

own ears to be assured it was not her natural way of speech; if not, her imitation was very happy; her singing is very agreeable; her action is pretty, and tolerably just; and when she was encored, her thanking the audience, in dropping a short country courtesy, was highly in character, and had great merit, though in a trifle.

Hints and Observations for the Improvement of Agriculture.
Continued from Page 539.

On the Advantages of preserving a Rick of Straw for thatching, in Years wherein it is long. By a Wiltshire *Farmer.*

THERE is no article produced by a farm but what may be turned to some advantage: I cannot recollect any one thing so trivial, that it might prudently be neglected.

I allow that straw is not the most important article that comes under the notice of the farmer; yet is it surely worth his attention.

It is well known that most of the barns, stables, out-houses, and even many of the farm-houses, are thatched: for this use great quantities of straw are annually consumed, and the farmer is at certain seasons often at a loss to get straw proper for the occasion. I have myself frequently threshed wheat merely because I wanted straw for thatching, and I suppose many other farmers have done the same.

I occupy, gentlemen, a very considerable farm not many miles from *Devizes:* as I have a lease of the land, it is my business to keep the buildings belonging to it in repair. There being four barns on the estate, besides stables, cart-lodges, cow-houses, *&c.* I have every year a great deal of thatching to do, and have, as I before observed, often been in great distress for want of straw.

Notwithstanding these frequent wants and inconveniencies, I continued many years (perhaps, in some sort, influened by the conduct of my neighbours) in the old track; that is, I never knew the value of wheat straw till I was in want of it, and as soon as that want was supplied, I soon forgot it.

At length, however, I was, to my cost, brought to a serious reflection; for some half-score years ago there came, in the month of November, such a furious gust of wind, as to rip off the greatest part of my thatching in one night; the straw of the thatching being dispersed here and there, and entirely spoiled.

This required an immediate remedy: I could not therefore think of waiting till any of my wheat was threshed out, the quantity of straw I had occasion for being so considerable.

I applied to my neighbours, who, occupying smaller farms, and having occasion for money, had threshed out a great deal of their wheat to carry to market: they supplied my wants, it is true; but taking the advantage of my necessity, they made me pay so dear for what straw I had, that I was above thirty pounds out of pocket by this single gust of wind.

Experience will, they say, make a fool wife: I took the hint, and have ever since guarded against a misfortune of the like nature.

I now constantly every year make a rick of wheat straw, unless it happens to be very short, when I keep

keep my rick two years, inſtead of making a new one the ſecond year.

This may, and doubtleſs will, by ſome of your readers be thought an unneceſſary expence; yet, as I find it anſwer, I am determined to continue the practice. I not only rick the ſtraw, but I alſo ſlightly thatch the rick to keep out the weather; yet, after all, I ſave by it.

As I keep a very regular account of my farming expences, I find that in the ſpace of ten years I am a gainer of fifty-three pounds, by ſaving in this manner a rick of ſtraw for thatching, beſides what I ſaved by not threſhing my wheat at an improper ſeaſon. When I ſay I am a gainer of ſo much money in the time, I mean a clear gain: after deducting the expences of making up the rick, thatching it, *&c.* my expences in thatching for the laſt ten years have been fifty-three pounds leſs than they were the ten preceding years; and this I can eaſily account for, and will, for the ſatisfaction of your readers, at leaſt in part, do it.

I now always do my thatching work at the moſt convenient ſeaſon, being never in want of ſtraw; and, for the ſame reaſon, as ſoon as any part of my thatching is deficient, I have it immediately repaired, which is a great ſaving.

My thatching now laſts longer than it uſed to do, for I never thatch with ſhort ſtraw, having always, as I obſerved before, long ſtraw to uſe; for in the years when the ſtraw is long, I ſave the largeſt rick, which I have ſometimes kept two or three years, till the wheat ſtraw has been again long.

In the ſpace of the laſt ten years I had two accidents happened, which would have proved very expenſive to me, if I could not have reſorted to my ſtraw rick.

The firſt was, that one of my ſons (a boy about ten years of age at the time) ſet fire to the thatch of a large barn, by means of a ſquib. It burnt furiouſly for ſome time, and ſo far damaged the roof, that I was obliged to have it new thached; for which purpoſe I made uſe of a part of my ſtraw rick, and it was finiſhed in a few days; whereas, if I had not had this rick, I muſt have bought ſhort ſtraw, for there was ſcarcely any other to be had, at a large price, and the thatching could not have been finiſhed ſo ſoon; by which means I ſhould have had a conſiderable quantity of barley, that was in the barn, damaged, for it rained very hard, for a conſiderable time, in a few days after the thatch was repaired.

The other accident was of the ſame nature with that mentioned in the beginning of this letter; I mean, I had a good deal of thatch ſtripped by wind; but it was ſoon repaired, without any damage to the corn that was in the barns at the time.

All this, perhaps, will not be enough to perſuade your practical readers to rick their long ſtraw. If this is the caſe, they muſt even continue their old practiſes: yet I hope I may be permitted to ſay one thing, which I know to be true; what I mean is this, that farmers, if they would attend to matters which they generally think beneath their conſideration, would get more money than they do: profits ariſe from what appear to be trifles at firſt ſight, and the mereſt trifle ſhould be by a farmer attended to.

A habit of induſtry, frugality, œconomy, and perſeverance, is abſolutely neceſſary to the occupier of land, if he does not mean ſoon to ſhift his quarters.

Muſ. Ruſ.

A letter from the Rev. Mr. Richard Wallis, curate of Carham, near Berwick-upon-Tweed, containing a method of curing cattle that are ſwelled or hoved.

SOmewhat above two years ago, I had a fine calf, near four months old, which ſwelled all over its body to ſuch a degree, that I hourly expected its death, owing, I believe, to its lying wet. This ſwelling, however, was with great difficulty carried off, by giving it internally warm and laxative medicines.

After this I ſent it to graze with my friend Mr. Gregſon's calves. It had not been long there, when that gentleman ſent me word the calf was greatly ſwelled, and in all probability muſt die very ſoon, except immediate relief could be procured.

I forthwith ordered one of his men, upon ſeeing the diſtreſs of the poor creature, to run his pen-knife, as deep as he could, through that part of the ſwelling which riſes higheſt near one of the hip-bones, and to put into the orifice the barrel of the largeſt quill that could be got, in order to carry off the pent-up wind.

This having been done, the wind ruſhed out with a ſurprizing force and offenſive ſmell; and, that none of this putrid fluid might be left behind, we preſſed its ſides together as cloſe as poſſible.

The calf found immediate relief, drank its milk, eat ſome hay heartily, and continued well till a fall of rain made the ſwelling return, which induced me to tap it again; and it mended.

Three times after this, upon catching cold, it ſwelled, and was tapped, always receiving ſudden and ſurpriſing eaſe.

Upon this I had a vein opened, and the blood was, as I expected, thick, and had ſcarcely any *ſerum* in it, reſembling that of a perſon in an ague: hence I thought a fellon-drink, ſuch as is generally uſed, would carry off the diſtemper altogether.

Such an one I made, and gave it; and the calf has never had any return of the ſwelling ſince. It is now grazing with my friend's young cattle, is big with calf, and I truſt will turn out a very fine cow.

Muſ. Ruſ.

An experienced method of ſowing clover on barley, recommended to the notice of farmers.

NOthing is more frequently practiſed than ſowing clover with ſpring corn, and it is reckoned very good huſbandry; yet is it often the occaſion of great loſs to the farmer, nay, ſometimes almoſt the entire loſs of a barley crop.

A few years ago I ſowed twenty-five acres of land in fine tilth with broad clover and barley; but the ſpring being backward and cold, and the ſummer wet, the clover got too forward, and overpowered the barley.

At harveſt they were both cut together; and the clover being full of juice, occaſioned its being a long tedious time before I could houſe my barley.

When I had got it into the barn, the men complained much of its threſhing ſo badly, that they could not undertake to do it unleſs I would double the price to them: this I could not afford; however, I ordered them to give it only a light beating, leaving the under corn in the ſtraw, together with the clover, for my cattle.

I loſt, in fact, half my crop by the clover; and what barley I got was lean, and thin bodied, fetching me but a very indifferent price at market.

As

As I had before experienced ſeveral ſuch loſſes, I was determined to find out, if poſſible, ſome remedy. I applied to a neighbour, a very intelligent man, who adviſed me to ſow my clover, for the future, a month after my barley, and it would not prove too rank.

I followed his advice, and found it to anſwer extremely well, inſomuch that I have, to my great advantage, continued the practice ever ſince.

There is no danger of the clover failing, though the ſeaſon ſhould prove dry; and the ſeed is to be ſcattered on the ground without farther care, for there is no occaſion to harrow or roll it: the roots and blades of the barley will keep moiſture enough in the land to ſupply the ſmall wants of the clover during its infant growth, and when the barley is off, it will thrive amain.

I muſt adviſe the farmer to ſee that he has good ſeed; and this he can know no other way but by trying it, by ſowing ſome in his garden.

The method is very eaſy. Let him count off a certain number of ſeeds, ſuppoſe two hundred; and having prepared a bed, let theſe be ſcattered regularly on it.

He is then to obſerve how long they take coming up, and how many of the ſeeds miſs; and by this he will be enabled to judge of the goodneſs of his clover-ſeed, and ſow a quantity according to what the reſult of his experiment is.

I muſt note, however, that if the weather is very dry, it may be proper to ſhade the bed. *Muſ. Ruſ.*

On the benefit of lime in Sea Voyages, particularly to the coaſt of Guinea, in the Slaving Trade.

I Have been captain of a Guineaman ſeveral voyages; on which occaſions I always took a half-barrel of unſlaked lime with me, to be ready to uſe to ſweeten the ſhip's water.

On the ſlaves being turned down in an evening, we always got our water up, in a caſk we have on purpoſe, abaft our barricade, firſt ſtraining the water off out of the caſk, being the ſediment of what was left that day to put into the boiler (which was of iron, as I never uſed a copper) for the next day's ſlaves proviſion; then we filled our caſk out of the hold, the water often being thick, and ſtinking very much; to remedy which we always put three or four meat ſpoonfuls of the lime to a puncheon of water, containing about ninety gallons.

The following morning the water would be as clear as any ſpring water, and as ſweet.

I ſhall ſay no more, but refer you to Alſton's Diſſertations on quick lime, and its great uſe in ſea voyages.

I had always good ſucceſs in both white and black from mortality, a great deal of which I attributed to the lime in water; and after uſing it a little while, the ſlaves would not drink the water without lime was in it.

If this hint ſhould prove of any ſervice, it would give me pleaſure to reflect I had contributed my mite, and wiſh I could do more for my good a king and my country.

Your humble ſervant,

Once a Sailor, now a Farmer.

N. B. In reading Dr. Mead's works, there is mention made of a ventilator by fire from the furnace, which being tried on board his majeſty's ſhips, complaint was made of the fire going down with the pipe.

This might be eaſily remedied by forming it into the furnace with a ſwan's neck.

MATHEMATICA

MATHEMATICAL CORRESPONDENCE.

To the Editors of the General Magazine.

SIRS,

AS a lover of good nature, Truth, and ſcience, I was well pleaſed with the ingenious Mr. John Clarke's defence of Mr. Tho. Walker, and in order to clear that gentleman of Mr. Todd's charge at p. 188 of your magazine, which was entirely omitted by Mr. Clarke; many of your readers here, who implicitly believe Mr. T. Walker's innocence of that piracy, would like to know, how his name came prefixed to theſe queſtions and ſolution in Martin's Magazine: becauſe, 'tis manifeſt, that, they were publiſhed *verbatim*, by Mr. R. Dunthorne and Mr. W. Bevil, in the Ladies Diary, many years before that time. Now, Sir, by inſerting this, in your next magazine, you will give Mr. T. Walker an opportunity to refute that charge ſo potently urged againſt him, whoſe known modeſty, if not excited, probably would let it paſs unanſwered.

I am, Sirs, with much eſteem,

Your humble ſervant,

Philalethes Londinenſis.

MATHEMATICAL QUESTIONS, *anſwered.*

Queſt. 45, *anſwered by Miſs* Elizabeth Ley, *of Crediton.*

FIRST we have $x^2 + y^2 = 410$, and $yx^2 = 931$, hence $x^2 = \frac{931}{y}$, which ſubſtituted for its equal (x^2) in the firſt, we have $\frac{931}{y} + y^2 = 410$ ($= 931 + y^3 = 410y$) $= y^3 - 410y = -931$, from which equation it appears (upon trial) that y is ſomething more than 2,3; let therefore $r + z = y$, then this involved and ſubſtituted for y in the above equation, according to the method of converging ſeries we have $z = \frac{410r - 931 - r^3}{3r^2 - 410}$ $= .000423$, hence $y = r + z = 2.300423$: therefore $x = 20,11735$. W. W. R.

This Queſtion was alſo anſwered by Meſſrs. Huſbands, Adams, Probert, Gough, Rawle, Clerk *the propoſer*, Kearnot, Lakeland, Sewell, Rotherham, Barker, Hartly, *and* Coppell.

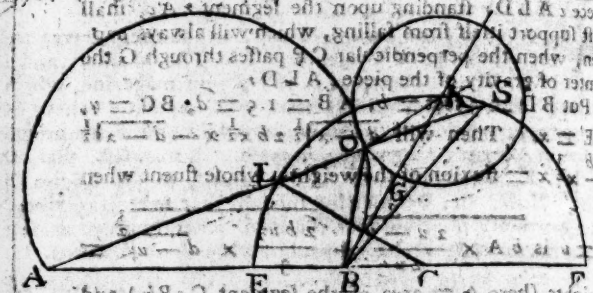
Queſt 46, *anſwered by Mr.* J. Hartly, *of Lewes.*

PUT $a = 1064$, $x =$ the leaſt number, then $\frac{5x}{2} =$ the greateſt, the ſum of whoſe cubes is $x^3 + \frac{125x^3}{8} = a$, which equation, multiplying by 8 and the cube root extracted will bring $x = 4$. Conſequently $y = 10$.

Solutions to this queſtion were ſent by Mr. I. M. Coppell, *Mr.* T. Barker, *Mr.* B. Rotherham, *Miſs* Eliz. Ley, *Mr.* W. Sewell, *Mr.* W. Lakeland, *Mr.* W. Kearnot, *Mr.* H. Clerk, *Mr.* W. Rawle, *Mr.* W. Gough *the propoſer*, *Mr.* J. Probert, *Mr.* T. Adams, *Mr.* J. Huſbands, *and Mr.* R. Noſſen.

Queſt. 47. *Anſwered by* Sangrado, junior, *the propoſer.*

CONSTRUCTION.



JOin the given points A, B, and on A B deſcribe a ſegment of a circle to contain the given angle, and by prob. the 19th *Simp. ſelect Exer.* deſcribe a ſemi circle E S F (whoſe center C) which may be the locus of the vertex of a triangle whoſe baſe A B and whoſe ſides A S, S B are in the given ratio, make the angle G B F = A O B and in B K take G B, ſo that G B × A F may equal the given rectangle, take G K to C E in the ratio of B G to A E, with G K deſcribe the circle K G O, meeting A O B, in O, draw A O S, join E S, B O and it is done.

DEMONSTRATION.

Join K O, C L, then becauſe G K : B G :: C E : A E (conſtr.) (by 12. 5) B K : K O (K G) :: A C : C L (C E) and the angle O B K = O A B, alſo the angles A L C, B O K are both leſs or not leſs than a right angle, therefore the triangles, A C L, B K O are ſimilar (7.6) whence A L : B O :: A C : B K :: A E : B G, and ſo A L × A S : B O × A S :: A E × A F : B G × A F; but A L × A S = A E × A F, therefore, B O × A S = B G × A F = the given rectangle (conſtr.) and A S is to S B in the given ratio (conſtr.) *Q. E. D.*

Queſtion 48, *anſwered by Mr.* I. M. Coppell, *a pupil under Mr. Holden of Liverpool.*

LET x = the diameter of the iron cylinder; then, per data,

$2880 \times .7854$ = ſolidity of the firr cylinder if entire,

$12x \times .7854$ = the part of the iron cylinder, within the firr,

$2880 - 12x \times 7854$ = the real inches of firr. And,

$12x \times .7854$ = the real inches of iron.

Let, then, the ſpecific gravity of iron = 7.644, and that of firr = .58. Whence,

$1670.4 - 6.96x \times .7854$ = the whole weight of firr,

$107.016x \times .7854$ = the whole weight of iron,

Their ſum = $1670.4 + 100.056x^2 \times .7854 = 2880 + 2x^2 \times .7854$.

Therefore $98.056x^2 = 1209.6$ and $x = \sqrt{\frac{1209.6}{98.056}} = 3.51223$ = Diameter of iron cylinder.

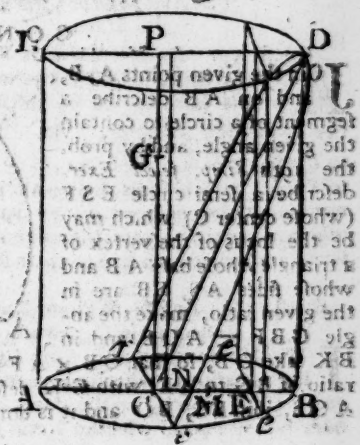
There is a ſmall error cauſed by the roundneſs of the ends of the cavity in the firr cylinder where the iron one goes through it, but as this would not be $\frac{1}{1000}$th part of an inch more, I thought it would take up too much room to ſend you the fluctionary proceſs, which only encreaſeth the iron cylinder's diameter to 3.5137.

Meſſrs. Adams, Brown, Barker, *and* Prieſtley *the propoſer, ſolved this Problem.*

Queſt.

Quest. 49. *answered by Mr.* G. Brown, *of Portsmouth Common, the Proposer.*

LET A L D B represent the given cylinder, *c* B D *r* the piece to be cut off, so that the remaining piece *c* A L D *r* standing upon the segment *r* A *c*, shall just support itself from falling, which will always happen, when the perpendicular C P passes through G the center of gravity of the piece *c* A L D *r*.



Put B D $= 5$ feet $= b$, A B $= 1.5 = d$, B C $= y$, B E $= x$. Then will $\overline{d-x}^{\frac{1}{2}} 2bx^{\frac{1}{2}}\dot{x} - \overline{d-x}^{\frac{1}{2}} \frac{2b}{u} x^{\frac{3}{2}}\dot{x} =$ fluxion of the weights, whose fluent when $x = u$ is $bA \times \frac{2u-d}{3u} + \frac{2bu^{\frac{3}{2}}}{3} \times \overline{d-u}^{\frac{3}{2}} =$ weights (here $A =$ area of the segment C *c* B *r*) and $\overline{d-x}^{\frac{1}{2}} 2bx^{\frac{3}{2}}\dot{x} - \overline{d-x}^{\frac{1}{2}} \frac{2b}{u} x^{\frac{5}{2}}\dot{x} =$ fluxion of the momentums, whose fluent, when $x = u$, is $bA\dot{x}\,\frac{d}{2} - \frac{5d^2}{16u} + \frac{5bd}{12} - \frac{b}{6} \times \overline{du-u^2}^{\frac{3}{2}} =$ momentums; $\therefore \frac{\text{momentums}}{\text{weights}} = BM = \frac{\overline{A \times 24du - 15d^2 + 20d - 8u \times 4u - u^2}^{\frac{1}{2}}}{8A \times 6u - 3d + \overline{du-u^2}^{\frac{3}{2}} 32}$ the distance of the center of gravity of the piece *c* B D *r* from B D upon B A, then $CM = x - \frac{A \times 24du - 15d^2 - 20d + 8u \times \overline{du-u^2}^{\frac{3}{2}}}{8A \times 6u - 3d + \overline{du-u^2}^{\frac{3}{2}} 32}$, and as the solidity of A D $=$ .7853981 $6d^2b$: solidity of *c* B D *r* $= \frac{bA \times 6u - 3d + \overline{du-u^2}^{\frac{3}{2}} 4b}{6u}$ :: C M : C N $= \frac{A \times 48u^2 - 48du + 15d^2 + 40u - 20d \times \overline{du-u^2}^{\frac{3}{2}}}{48u \times .785398 16d^2}$, now C N $+ \frac{d}{2} = u$, *i. e.* $\frac{A \times 48u^2 - 48du + 15d^2 + 40u - 20d \times \overline{du-u^2}^{\frac{3}{2}}}{48u \times .785398 16d^2} + \frac{d}{2} = u$, put into numbers and solved, $u = .8915312$, the decimal parts of a foot, the distance required. *Q. E. I.*

Note, See a false sol. to quest. 243. p. 38. of the Palladium for 1764. G. Brown.

Quest. 50, *answered by the same Gentleman,*

THE fluent of $\frac{\dot{x}}{1+x^2}$ is the length of an arc of a circle, whose radius 1, and nat. tang. is x, or $x - \frac{x^3}{3} + \frac{x^5}{5} - \frac{x^7}{7} + \frac{x^9}{9}$, &c. put $= y$, then $y\dot{x} = x\dot{x} - \frac{x^3\dot{x}}{3} + \frac{x^5\dot{x}}{5} - \frac{x^7\dot{x}}{7} + \frac{x^9\dot{x}}{9}$, &c. whose fluents are $yx = \frac{1}{2}$ h. l. $1+x^2 = \frac{x^2}{1.2} - \frac{x^4}{3.4} + \frac{x^6}{5.6} - \frac{x^8}{7.8} + \frac{x^{10}}{9.10}$, &c. then will $\frac{x}{1.2} - \frac{x^3}{3.4} + \frac{x^5}{5.6} - \frac{x^7}{7.8} + \frac{x^9}{9.10}$, &c. $= y = \frac{\text{h. l. } 1+x^2}{2x}$, and put $\frac{1}{v} = x$ $\therefore \frac{1}{1.2v} - \frac{1}{3.4v^3} + \frac{1}{5.6v^5} - \frac{1}{7.8v^7} + \frac{1}{9.10v^9}$, &c. $= y - \frac{v}{2}$ h. l. $\frac{1+v^2}{v^2}$, the sum of the infinite series required. *Q. E. I.*

This question was likewise answered by Philalethes Londinensis.

New QUESTIONS *to be answered.*

Queſt. 57. *By Mr.* Thomas Sadler.

A Uſurer dying had left the whole ſum of his fortune, to be diſpoſed of in the following manner, viz. To A $\frac{2}{3}$, to B $\frac{3}{10}$, to C $\frac{1}{8}$, to D $\frac{1}{20}$, to E $\frac{1}{4}$, and to F $\frac{1}{30}$, which ſums being all paid, the remainder he ordered to be paid to C, which was 800l. Quere the uſurer's whole ſum, and what each had to their ſhare.

Queſt. 58. *By Mr.* William Rawle, *of* Redruth, *in* Cornwall.

I Would know my age, from the following equations, wherein x repreſents the year, y the month, z the day, and v the hour before noon, wherein I was born?

$$x + y + z + v = 1764 = a$$
$$xz + yv = 10492 = b$$
$$xv + x + v = 19227 = c$$
$$x^2 - y - z = 3052002 = d$$

Queſt. 59. *By Mr.* William Sewell *of* Wymondham.

WHAT particular leaſt whole number is that which being divided by 2, 3, 4, 5, 6, 7, 8, 9; ſhall leave a remainder of 1, 2, 3, 4, 5, 6, 7, 8, reſpectively?

Queſt. 60. *By Miſs* Elizabeth Ley, *of* Crediton.

QUere the length of a pendulum, as alſo the numbers of its vibrations in a minute, when the length is to the number of vibrations as 9 to 20?

Queſt. 61. *A* Problem. *By* Sangrado, *Junior.*

IN a right lined triangle the ſquare of the baſe is equal to a rectangle under a given line, and one of the ſides, and the perpendicular to this ſide, as alſo the vertical angle (with reſpect to the baſe) are given: to determine the triangle.

Queſt. 62. *By Mr.* Geo. Brown, *teacher of the mathematics, in the* Tree-Rope-Walk, Portſmouth-Common.

SUppoſe there is a plane triangle whoſe baſe is 56, and its ſides are 34 and 48; it is required to find the dimenſions of the greateſt inſcribed ellipſis, ſo that one of its principal diameters ſhall be parallel to a line drawn from the vertical angle to biſect the baſe?

ERRATUM. In Mr. Dalby's Solution to queſt. 35, at p. 496, l. 1, *for* $\frac{4P^2x}{P^2 - x^2}$ *read* $\frac{4P^2x^2}{P^2 - x^2}$.

POETRY.

On SCATING.

ALONG the plain what chilling proſpects riſe!
The whiten'd landſcape deep in horror lies!
From the bleak north inclement tempeſts pour;
Fraught with keen nitre comes the icy ſhow'r:
The ſilent ſtream forgets its wonted fall;
Shoots into length, and forms a ſtill canal;
Proteus himſelf in icy fetters bound,
No longer plays amidſt the watry round;
And wand'ring Neptune from his oozy bed
Views the ſtill ocean vaulted o'er his head.
Now to the banks they crowd, whoe'er excell
In ſwift dexterity of ſliding well.
Here various arts the wond'ring circle view;
One ſkims the ſurface with unaided ſhoe;
In nobler arts another's pride is ſeen,
His careful hand adapts a bright machine;
With eager foot he launches on the main,
Viſits each part, and rounds the cryſtal plain.
See, with what force each labour'd ſtroke he plies!
Now o'er the wave with ſpeed redoubled flies!
Darts thro' the mead, as if he ſwam in air!—
Now with quick whirl he checks his mid career—
Cautious though bold, he turns the pointed heel;
The plough'd ice creaks beneath the goring ſteel;

Swift

Swift he returns amid th' admiring throng,
And wantons o'er the wave, and plays and glides along.
Hence 'midſt the rigours of the raging froſt,
External cold in inward warmth is loſt;
More vigorous heat his glowing blood inſpires,
And his cheek kindles with the brighteſt fires.
If the rough ice, where riſing knots abound,
Some artiſt's ſmooth-continu'd ſtroke confound;
Or if too weak, the gaſping ſurface yield,
And lay the heroe proſtrate on the field;
Then o'er the lake loud peals of laughter riſe,
Bound from the ſhore, and float along the ſkies;
With ſneer inſulting o'er the wretched, all
Deride his dripping garb, and awkward fall.
But ſee, of youths a ſwift experienc'd band,
All emulous of fame in order ſtand;
Now to the race with arms extended ſtrain;
Bend to each ſtroke, and ſweep the level plain;
With rounds ambiguous, wond'rous to behold,
They wind their way in many a ſpiry fold;
Orb within orb their circling ſteps impreſs,
Small by degrees, and beautifully leſs.
So when fleet ſwallows, a long twittering train,
In ſome clear evening wanton o'er the plain;
Now ſhoot along the mead in airy rings,
Now ſhave the level flood with ſteady wings;
The pleas'd ſpectator, while they lightly bound,
Admires each giddy wheel, and mazy round.
Thus arm'd with ſteel, when wintry horrors riſe,
O'er the firm ice the ſwift Batavian flies;
Thro' long canals he cuts a ſmoother road,
And ſcorns the tedious bank which, erſt he trod;
Speeds to his friend thro' ſkies and realms unknown,
Or views the wonders of ſome diſtant town.
And oft' the village dame undaunted glides
O'er the calm ſurface of the faithful tides;
Thro' the wide champaign ſeeks the diſtant fair,
Secure and fearleſs for her brittle care:
Lo, by the poliſh'd metal wafted o'er,
She lands in ſafety on the deſtin'd ſhore;
The poliſh'd metal ploughs th' indented plain,
And the long hoary furrows whiten all the main.

The Two Beavers. *A* Fable.

'TWERE well, my friend, for human kind,
Would ev'ry man his buſ'neſs mind;
In his own orbit always move,
Nor blame, nor envy thoſe above.
A beaver well advanc'd in age,
By long experience render'd ſage,
Was ſkill'd in all the uſeful arts,
And juſtly deem'd a beaſt of parts;
Which he apply'd (as patriots ſhou'd)
In cultivating public good.
This beaver, on a certain day,
A friendly viſit went to pay
To a young couſin, pert and vain,
Who often rov'd about the plain:
With ev'ry idle beaſt conferr'd,
Hearing, and telling what he heard,
The vagrant youth was gone from home,
When th' ancient ſage approach'd his dome;
Who each apartment view'd with care,
But found each wanted much repair.
The walls were crack'd, decay'd the doors,
The corn lay mouldy on the floors;
Thro' gaping crannies ruſh'd amain
The bluſt'ring winds, with ſnow and rain.
The Timber all was rotten grown,———
In ſhort, the houſe was tumbling down.
The gen'rous beaſt, by pity ſway'd,
Griev'd to behold it thus decay'd;
And while he mourn'd the tatter'd ſcene,
The maſter of the lodge came in.
The firſt congratulations o'er,
They reſt recumbent on the floor;
When thus the young conceited beaſt
His thoughts impertinent expreſt.
I long have been ſurpriz'd to find
The lion grown ſo wond'rous kind
To one peculiar ſort of beaſts,
While he another ſort deteſts,
His royal favour chiefly falls
Upon the ſpecies of jack-alls.
They ſhare the profits of his throne,
He ſmiles on them, and them alone,
Mean while the ferret's uſeful race
He ſcarce admits to ſee his face;
Traduc'd by lies and ill report,
They're baniſh'd from his regal court,
And counted, over all the plain,
Oppoſers of the lion's reign.
Now I conceiv'd a ſcheme laſt night,
Would doubtleſs ſet this matter right;
Theſe parties ſhould unite together;
The lion partial be to neither,
But let them both his favours ſhare,
And both conſult in peace and war.
This method (were this method tried)
Would ſpread politic baſis wide,
And on a bottom broad and ſtrong,
Support the ſocial union long———
But uncle, uncle, much I fear,
Some have abus'd the lion's ear.
He liſtens to the leopard's tongue;
That curſed leopard leads him wrong.
Were he but baniſh'd far away———
You don't attend to what I ſay!
Why really couz, the ſage rejoin'd,
The rain, and ſnow, and driving wind,
Beat through with ſuch prodigious force,
It made me deaf to your diſcourſe.
Now couz, were my advice purſu'd,
(And ſure I mean it for your good)

Methinks

Methinks you ſhould this houſe repair;
Be this your firſt and chiefeſt care.
Your ſkill the voice of prudence calls
To ſtop theſe crannies in the walls,
And prop the roof before it falls.
If you this needful talk perform,
You'll make your manſion dry and warm;
And we may then converſe together,
Secure from this tempeſtuous weather.

LIFE *troubleſome, becauſe we know not how to uſe it. An* Horatian *Epiſtle.*

WHat, Sir!—a month and not one line afford?
'Tis well:—How finely ſome folks keep their word!
I own my promiſe.—But to ſteal an hour,
'Midſt all this hurry—'tis not in my pow'r.
Where life each day does one fix'd order keep,
Succeſſive journies, wearineſs and ſleep.
Or if our ſcheme ſome interval allows,
Some hours deſign'd for thought and for repoſe;
Soon as the ſcatter'd images begin
In the mind to rally—company breaks in:
Reaſon, adieu, there's no more room to think;
For all the day behind is noiſe and drink.
Thus life rolls on, but not without regret,
When'er at morning in ſome cool retreat
I walk alone:—'tis then in thought I view
Some ſage of old; 'tis then I think of you:
Whoſe breaſt no tyrant paſſions ever ſeize,
No pulſe that riots, blood that diſobeys,
Who follow but where judgment points the way,
And whom too buſy ſenſe ne'er led aſtray.
Not that you joys with moderation ſhun,
You taſte all pleaſures, but indulge in none.
Fir'd by this image, I reſolve anew:
'Tis reaſon calls, and peace and joy's in view.
How bleſs'd a change! A long adieu to ſenſe:
Oh ſhield me, ſapience! Virtue's reign, commence!
Alas, how ſhort a reign!—The walk is o'er,
The dinner waits, and friends ſome half a ſcore.
At firſt to virtue firm, the Glaſs I fly,
'Till ſome ſly ſot,—"Not drink the family!"
Thus gratitude is made to plead for ſin;
My trait'rous breaſt a party forms within:
And, inclination brib'd, we never want
Excuſe—"'Tis hot, and walking makes one faint."
Now ſenſe gets ſtrength; my bright reſolves decay,
Like ſtars that melt at the approach of day:
Thought dies; and ev'n at laſt your image fades away.
My head grows warm; all reaſon I deſpiſe;
"To-day be happy, and to-morrow wiſe."
Betray'd ſo oft, I'm half perſuaded now,
Surely to fail, the firſt ſtep is to vow.
The country lately! 'twas my wiſh; oh there!
Gardens, diverſions, friends, relations, air.
For London now, dear London, how I burn!
I muſt be happy, ſure, when I return.
Whoever hopes true happineſs to ſee,
Expects what never was, nor e'er will be:
The neareſt eaſe, ſince we muſt ſuffer ſtill,
Are they, who dare be patient under ill.
Whilom, a fool, ſaw where a fiddle lay;
And after poring round it, 'gan to play:
Above, below, acroſs, all ways he tries;
He tries in vain, 'tis diſcord all, and noiſe.
Fretting he threw it by: then thus the lout;
"There's muſick in it, could I fetch it out."
If life does not its harmony impart,
We want not inſtruments, but have not art.
'Tis endleſs to defer our hopes of eaſe,
Till croſſes end, and diſappointments ceaſe.
The ſage is happy, not that all goes right,
His cattle feel no rot, his corn no blight;
The mind for eaſe is fitted to the wiſe,
Not ſo the fool's:—'tis here the difference lies;
Their proſpect is the ſame, but various are their eyes.

The Duty of Employing one's Self.

AN HORATIAN EPISTLE.

FEW people know it, yet dear Sir, 'tis true,
Man ſhould have ſomewhat evermore to do:
Hard labour's tedious, every one muſt own;
But ſurely better ſuch by far, than none.
The perfect drone, the quite impertinent,
Whoſe life at nothing aims, but—to be ſpent;
Such Heaven viſits for ſome mighty ill:
'Tis ſure the hardeſt labour to ſit ſtill.
Hence that unhappy tribe who nought purſue:
Who ſin, for want of ſomething elſe to do.
Sir John is bleſs'd with riches, honour, love,
And to be bleſs'd indeed, needs only move.
For want of this, with pain he lives away,
A lump of hardly animated clay:
Dull till his double bottle does him right;
He's eaſy, juſt at twelve o'clock at night.
Thus for one ſparkling hour alone he's bleſt;
Whilſt ſpleen and head-ach ſeize on all the reſt.
Their indolence, ſome with black humours fills;
Racking their brains with viſionary ills.
Hence what ſound out-cries, and well-meaning rage,
What endleſs quarrels at the preſent age!
How many blame! how often may we hear,
'Such vice!—Well, ſure, the laſt day muſt be near!'
T'avoid ſuch freaks, imagination-pains,
The ſad creation of diſtemper'd brains,

Diſ-

Dispatch, dear friend! move, labour, sweat, run, fly,
Do aught——but think the day of judgment nigh.

There are, who've lost all relish for delight;
With them no earthly thing is ever right,
T'expect to alter to their taste, were vain;
For who can mend so fast, as they complain?
Whate'er you do, shall be a crime with such;
One while you've lost your tongue, then talk too much,
Thus shall you meet their waspish censure still;
As hedge-hogs prick you, go which side you will:
Oh! pity these whene'er you see 'em swell!
Folks call 'em cross—poor men! they are not well.

How many such in indolence grown old,
With vigour ne'er do any thing, but scold?
Who spirits only from ill-humour get;
Like wines that die, unless upon the fret?
Weary'd of flouncing to himself alone,
Acerbus keeps a man to fret upon.
The fellow's nothing in the earth to do,
But to sit quiet, and be scolded to.
Fishes and oaths, whene'er the master's sour'd,
All largely on the scape-goat slave are pour'd.
This drains his rage; and tho' to John so rough,
Abroad you'd think him complaisant enough.
As for myself, whom poverty prevents
From being angry at so great expence;
Who, should I ever be inclin'd to rage,
For want of slaves, war with myself must wage;
Must rail, and hear; chastising, be chastiz'd;
Be both the tyrant, and the tyranniz'd;
I choose to labour, rather than to fret:
What's rage in some, in me goes off in sweat.

If times are ill, and things seem'd never worse,
Men, manners to reclaim—I take my horse.
One mile reforms 'em, or if aught remain
Unpurg'd—'tis but to ride as far again.
Thus on myself in toils I spend my rage;
I pay the fine, and this absolves the age.
Sometimes, still more to interrupt my ease,
I take my pen, and write——such things as these.
Which though all other merit be deny'd,
Shew my devotion still to be employ'd.
Add too, tho' writing be itself a curse,
Yet some distempers are a cure for worse,
And since 'midst indolence, spleen will prevail,
Since who do nothing else, are sure to rail:
Man should be suffer'd thus to play the fool,
To keep from hurt, as children go to school.
You should not rhime in spite of nature;—true,
Yet sure 'tis greater trouble if you do;
And if 'tis lab'ring only, men profess,
Who writes the hardest, writes with most success.
Thus for myself, and friends, I do my part,
Promoting doubly the pains-taking art.
First to myself, 'tis labour to compose;
To read such lines, is drudgery to those.

An Answer to the first Ænigma, October Mag. Page 500.

PRepar'd for mirth let Bacchanal souls
Insatiate quaff their rosy bowls,
I envy not their glee,
While I can ev'ry care invade,
With chaste Milenda blooming maid,
Over a dish of TEA.

London, Dec. 15, 1764. *R. Pingstone.*

A CHRONOLOGICAL MEMOIR *of* Occurrences,
For DECEMBER, 1764.

FOREIGN AFFAIRS.

RUSSIA.

Petersburgh, Oct. 14. HER Imperial Majesty persists in her laudable design of promoting useful knowledge through every part of her extensive dominions. For this purpose schools will be erected and endowed, where the children of the meanest peasants may be educated gratis. The Rev. Dr. Dumaresque, who was invited from England some time ago, to assist in carrying this great work into execution, arrived not long since, and has already had the honour of being admitted to an audience of the empress, who received him with great affability and condescension, and who has been pleased to assure him, that in contributing to facilitate the introduction of science among her subjects, he may constantly depend upon her favour and protection.

Dervis Effendis whom the Ottoman porte has sent to compliment the Empress of Russia

Ruſſia on her acceſſion to the throne, made his public entry into Peterſburgh the 11th. ult.

Peterſburgh, Nov. 20. The Ottoman miniſter ſet out from hence on his return to Conſtantinople the 15th of this month. Beſides the preſents which our court uſually makes to foreign miniſters at the time of their departure, her Imperial Majeſty ſent him a magnificent travelling coach, a gold ſnuff box enriched with jewels, and a pair of bracelets, likewiſe adorned with brilliants, for his niece. The miniſter was ſo pleaſed with the reception he met with here, that he ſpeaks of her Imperial Majeſty with great veneration.

They write from Peterſburgh, that twelve experienced geographers have lately returned from compleating a ſurvey of the extenſive province of Siberia. Their accounts are ſo favourable, that publick roads are to be made next ſummer at the expence of the Empreſs.

A Dutch captain of great experience, named Paulus Van Gilſen, has lately entered into the ſervice of Ruſſia, to command a naval expedition early next ſummer, fitted out by order of the Empreſs for making farther diſcoveries in the ſea of Great Tartary.

NETHERLANDS. *Hague, Dec.* 14. By order of the court of Holland, ſome late impious productions of the preſs, particularly a work intitled *Dictionaire Philoſophique*, have been burnt this morning by the hands of the common hangman. *Lond. Gaz.*

They adviſe from Holland, that the canals there are already frozen up; which is generally an indication of a ſevere winter.

POLAND. *Warſaw, Nov.* 17. The letter which the empreſs of Ruſſia has wrote to the prince primate, and which was preſented to him by prince Repnin, ambaſſador extraordinary from her Imperial majeſty, is as follows:

Monſieur the Prince Primate,

"It was reaſonable that I ſhould learn with much ſatisfaction the election, as free as unanimous, of count Poniatowſki to the crown of Poland, which your highneſs acquaints me with, by your letter of the 7th of September. 'Tis an event the moſt happy that could happen to your country; and I congratulate you the more ſincerely thereupon, as no body can be more zealous for its welfare than you are. You have ſhewn it by your indefatigable cares, and by your conſtant attention to ſecond my views, to ſhelter it during the interegnum from every ſtorm, and to facilitate the choice of a piaſt. He is the only king who can revive your conſtitutions, reſtore to the laws their force, and eſtabliſh the liberty and equality of the citizens. Theſe efforts, ſo praiſe worthy, have acquired your highneſs my everlaſting eſteem and affection. As to the reſt, I pray God to take you, Monſieur the prince primate, into his holy and worthy keeping. Peterſburgh, Sept. 30, 1764.

Signed,

CATHARINE."

Extract of a letter from Warſaw, Nov. 17.

"The king ſeems to abhor all exceſs in luxury; of which the following inſtance is a proof. Wanting to give his ſhoemaker ſome directions, his majeſty ordered him to be ſent for, and was ſoon after extremely ſurprized to ſee enter his apartment, in order to take meaſure of him, a man dreſſed in embroidered velvet. He was, it's true, the court ſhoemaker; but his majeſty diſmiſſed him, without permitting him to exerciſe, in that ſumptuous habit, the noble and brilliant functions of his office, ſaying at the ſame time, (ſeemingly in good-humour however) *What cloaths muſt I wear, if people of your profeſſion dreſs in this manner?*

Warſaw, Nov. 28. The King of Poland was crowned the 25th inſtant, with all the pomp and ceremonies cuſtomary on that important occaſion. His Majeſty received the congratulations of the foreign miniſters in the name of their reſpective ſovereigns; and the next day the homage of the towns of Warſaw and Cracow; and was pleaſed to knight ſix burgeſſes of the former place, and four of the latter. The joy of the nation was teſtified by every means poſſible, ſuch as illuminations, balls, &c. &c. which will probably continue till the opening of the diet. The firſt acts of ſovereignty were the inveſting with the order of the white eagle, Prince Repnin, ambaſſador from the court of Ruſſia; Prince Adam Czartoriſki; and the King's brother Abbe Poniatowſki.

The great charges vacant are not yet diſpoſed of. *Lond. Gaz.*

GERMANY. They write from Ratiſbon of the 7th ult. that the elector of Bavaria had ordered the father rector of the jeſuits of Landſhut, to leave his dominions in 24 hours, for ſuffering the ſtudents under his tuition to act a play reflecting on ſome ſtate affairs of that electorate.

Letters from Koningſberg, the capital of Pruſſia, dated the 12th of Nov. bring Advice, that on the preceding evening, about ſeven o'clock, a terrible fire broke out there in a ſailmaker's workſhop, near the herring wharf, where it immediately deſtroyed about

about 3000 barrels of that fish; and, running along the key, consumed the hemp, flax, and other warehouses filled with all sorts of merchandize. Afterwards the conflagration spread over the Kniphorff, the old town and Levenhaut, where it burnt with unextinguishable rapidity, reducing to ashes all the houses, hospitals, churches and public buildings. A great number of the inhabitants lost their lives, and the rest were reduced to the utmost misery and want.

Berlin, Nov. 20. The king has caused public notice to be given, that the fund of the bank which has just been established, may consist of 25,000,000 of dollars, to be divided into 100,000 actions of 250 dollars each, payable in gold at the opening of the bank, which is fixed for the first of June 1765. The grant is made out for 30 years.

The mathematical prize question proposed by the Berlin academy of sciences, is, "An explanation of the principle whereby water is raised by the machine commonly called Archimedes's screw, together with the means of improving this machine." The prize is a gold medal of fifty ducats weight.

Dresden, Nov. 25. Abbe Victor, who was governor to the elector, was last Wednesday dismissed from his employment; and M. de Forel, a commander of the order of Malta, who was formerly governor to the administrator and Prince Charles, is appointed governor and grand master in his room. *Lond. Gaz.*

Hamburgh, Nov. 16. On the 11th inst. a fire broke out at Moschleben, a village near Gotha, which burnt down the church, and 120 dwelling houses besides stables, barns, &c. and the unfortunate inhabitants had not time to save any of their effects.

Hamburgh, Nov. 27. We have an account from the Lower Elbe, that an earthquake had swallowed up 30 acres of land in the neighbourhood of that river, and substituted a lake of the same surface, and upwards of 40 fathom deep.

Hamburgh, Dec. 7. The accounts vary yet very much with respect to the loss sustained at Konigsberg by the late fire: it is said, that it amounts to about 67,000 l. sterling. *Lond. Gaz.*

Letters from Francfort of the 10th inst. give an account, that one Maria Magdalena Groff, a young girl, of ten years old, born at Mentz, plays upon eight different instruments of music, either alone or in concert. Her natural gifts for music are looked upon as the wonder of the age.

FRANCE. *Paris, Nov.* 19. An arret of the council of state is just published, which suppresses a pamphlet entitled, "Most humble and most respectful remonstrances of the parliament sitting at Rennes to the king, with the pieces which gave rise thereto." And all the lieutenant generals of the police of the kingdom are ordered to seek after the persons concerned in the printing and publishing the said pamphlet, that they may be dealt with according to the rigour of the laws.

They write from Paris, that several people are committed to the Bastille, for pretending to be in the secrets of the ministry, and spreading reports which have alarmed the public credits, and occasioned a fall in the actions and other funds.

Letters from Paris, of the 7th inst. say, that an edict of the French king's has just been registered there in parliament, whereby his majesty dissolves the society of Jesuits for ever; but permits them nevertheless to reside in his kingdom as individuals under subjection to the spiritual power of the priests of the places where they reside, on conforming themselves to the laws, and behaving in all respects as becomes good subjects. By the same edict an entire and perpetual stop is put to all criminal proceedings that have been commenced against them on any account whatsoever.

SPAIN. *Madrid, Oct.* 30. The Earl of Rochford, ambassador from the king of Great Britain, had, on the 19th inst. a private audience of the king, to whom he communicated his dispatches, in which his Britannick Majesty declared how much satisfied he was with the resolution this court had come to, in respect to the cutting logwood in the bay of Honduras, and with the disposition shewn to cultivate a good understanding between the two crowns. It is said, nevertheless, that this minister received at the same time, orders to insist on the losses being repaid, which were suffered by some few particulars.

Letters from Spain assure, that all the military preparations that have been lately carried on in that kingdom, were never designed against any other power than that of Barbary, which they add, will evidently appear next spring.

PORTUGAL. Letters from Lisbon advise, that a smart shock of an earthquake was felt the 12th of October last in the azores or western islands; its direction was from the south-west, and it did considerable damage at Fyal.

They write from Lisbon, of the 10th ult. that there is not the least appearance of a rupture with any power whatever, but that every thing wears the aspect of profound peace. His most Faithful majesty is concerting measures for inducing his subjects

jects to cultivate some of the best lands for the growth of grain; and salutary laws are framing to punish all who revolt against the officers of justice.

ITALY. They write from Parma, that the duke declared, on the 30th of October last, the marriage of the Princess his daughter, with the Prince of Austrias, heir to the crown of Spain. She was born Nov. the 11th, 1748.

AMERICA.

Extract of a letter from New-York, dated October 20.

"DUring the late session of the general assembly of this colony, there were presented by a committee appointed for that purpose, a representation and petition to the king's most excellent majesty; another to the lords spiritual and temporal in parliament assembled; and a third to the knights, citizens, and burgesses, representing the commons of Great Britain; which were read, approved of, and signed by the speaker, with orders to be forwarded immediately to Mr. Agent Charles. The purport of which are, that Mr. Charles use his utmost diligence to obtain the prayer thereof.—The principal subjects of these representations and petitions, are, that of the sugar act; of the act restraining paper bills of credit; and of the several acts of parliament lately passed relating to the trade of the northern colonies."

They write from Boston in New-England, that the disposition seems to continue in many of the inhabitants of that and the neighbouring governments, to cloath themselves with their own manufacture. That at Hampstead, on Long-island, in the province of New-York, a company of gentlemen have set up a new woollen manufactory, and have given notice to gentlemen, shopkeepers, and others, that they may be supplied with broad-cloths, equal in fineness, colour and goodness, and cheaper than any imported. Also that at Jamaica, on the same island, one Tunis Polpham is erecting a fulling-mill, which will be compleat in about a month, and carry on all the branches of a fuller and dyer of cloth. And that there are many articles of dress manufactured in that government, which exceed in strength and beauty, any that are usually imported from London.

Boston, Nov. 8. We hear from St. John's, in the province of Nova-Scotia, that on the 30th of Sept. last, at 12 o'clock at noon, they had a very severe shock of an earthquake there.

Letters from South Carolina mention, that in order to establish the Indian trade on a future good footing, all weights and measures used therein have been stamped, by order of the assembly, with the arms of the province, and duplicates sent to be deposited in the town-house of Chotte, and all the packhorse traders are to be licensed.

We hear from the Havanna, that the Spaniards continue to work with incredible diligence in fortifying the cavannoes, and repairing the Moro, which, by the neck of land being cut thro' whereon it is situated, is now on an island. The dockyards there have been put into such compleat order, that two very fine 80 gun ships to mount their cannon on two decks, are in great forwardness.

EAST INDIES.

LEtters received by the society for promoting christian knowledge, from Madrass, dated May 23, 1763, contain an account that their missionaries had stretched a great way into the country among the heathens, making many proselytes, and among the rest a number of weavers, who had set up six looms at Vapery, which promised much success. These missionaries also mention that the Rev. Dr. Franke, of Germany, had sent them a number of Tamulian types, with a promise of more, which they were to be enabled to use; the government having erected a printing office in the city of Madrass, and had given the care and inspection of the same to them. These letters say, that in July, 1762, Mr. Schwartz, a Danish missionary of Tranquebar, not only preached in the city of Transchour, but also in the king's palace. The king was present and heard him, but was not to be seen by him. Letters from Mr. Hutteman, the missionary at Calcutta, dated October 2, and Nov. 5, 1763, give an account that several had been received into the church from among the heathens, whose amazing

amazing and ſtupid idolatry he deſcribes in delineating the monſtrous ſerpents they worſhip; and their folly and cruelty, by relating an horrid act which happened the laſt year, when a very rich young widow burnt herſelf alive on the ſame funeral pile with her dead huſband.

IRELAND.

Dublin, Dec. 8.

LAST week a country-looking fellow went into a Grocer's ſhop in Thomas-ſtreet, and after buying a few articles, told the people of the ſhop he had ſeveral places to call at, and begg'd to leave a ſack in the ſhop for a ſhort time. It lay there ſome hours, when the ſhopkeeper cut the ſack open, and found a man concealed in it; who, upon being threatned, confeſſed that three men were to come at ſuch an hour, to aſſiſt him in robbing the houſe. In conſequence of which, they detained the fellow, and the villains coming agreeable to promiſe, they were all taken and lodged in Newgate.

SCOTLAND.

Edinburgh, Nov. 21.

A Tradeſman of this city, who had ordered his grave-cloths and coffin to be got ready, died yeſterday of an aſthmatic fit. Some days before his death he tried on his dead-cloaths, which were made of linen, but imagining them to be too cold, returned them back, in order to be lined with flanel. He paid for them himſelf, and drank a parting glaſs with his acquaintance.

COUNTRY.

THE 26th of Nov. lord Byron, maſter of the king's ſtag-hounds on Sherwood foreſt, turned out a deer on the race ground near Nottingham, for the amuſement of the gentlemen in that town and neighbourhood. There was the greateſt concourſe of gentlemen ever known on the like occaſion. The deer, immediately after he was turned out left the foreſt, and ran thro' Nottinghamſhire into Derbyſhire; and after running ſeveral miles into that county, he returned into Nottinghamſhire and croſſed the river Trent: he then ran into Leiceſterſhire, and in croſſing the river Soar at Kegworth the hounds came up with him.

This noble race was forty miles at leaſt, as they were four hours in the purſuit, without one check.

On Monday the 26th of November, a ſailor who was diſcharged from a man of war in Plymouth harbour, was robbed by a farmer, returning from Market, with whom he had agreed to ride a few miles on his road to Exeter. The ſailor rode on the ſame horſe before the farmer ſome way, and having told him, that he had received upwards of 9 l. for wages; the farmer ſoon after took an opportunity of pulling him off the Horſe, then beat him about the head, robbed him of all his money, and left him in the ditch, where he continued ſome time; but recovering, he walked back to a publick houſe, where the farmer and he firſt met, diſcovered the farmer's name, and, with proper aſſiſtance, he was the next morning taken and carried before a juſtice, who committed him to Exeter goal, to take his trial at the next aſſizes.

York, Dec. 18. On Wedneſday night laſt, about eight a clock, a large new barn full of wheat and rye, belonging to Anthony Cooper, of Sand-Hutton, near Thirſk, was wilfully ſet on fire by ſome perſons unknown, and entirely conſumed: During the confuſion occaſioned by the flames, the villains broke into the houſe of Francis Cooper (brother to the above unfortunate perſon) of the ſame town, whoſe family were aſſiſting at the fire, which they robbed of 50 l. and a ſilver tankard, that were in a box with ſeveral writings which they left untouched. Theſe miſcreants alſo attempted to rob Anthony Cooper's houſe, having forced open a window, and one of them was ready to enter it; but Mrs. Cooper luckily going home at that inſtant, the villain run off precipitately. A large ſtack of hay near the barn, was preſerved by the aſſiſtance of an engine from Thirſk.

The 16th inſtant the following melancholy accident happened at Lady Packington's, at Perdiſwell near Worceſter. Her adyſhip's two poſtillions being in the ſervant's hall, where a gun happened to lay upon the dreſſer, one of them (James Hawkes) caſually took it up, not imagining it was charged; and handling it in a very careleſs manner, it ſuddenly went off, and killed his fellow ſervant (John Corfield) who was eating his breakfaſt near the fire-ſide.—The coroner's inqueſt have brought in their verdict *Accidental killing by miſadventure.*

LONDON.

December 1.

LAST Tueſday ſe'nnight in the evening about eight o'clock, Margaret Bouſie, of Maudlin's rents, Wapping, a lone woman, whoſe huſband is at ſea, was murdered in her own houſe, by the fire ſide, in a moſt ſhocking manner, by being cruelly beat and wounded in ſeveral parts of her body with the poker, and her head almoſt cut off with a Razor, both which were found by her, and ſhe lying upon the floor in a pond of blood. The neighbours hearing her cries, looked through the key hole of the ſtreet-door, and ſaw the villain in the very act of cutting her throat, who, hearing them attempting to break open the door immediately ran up ſtairs with the candle, and putting the ſame in the cloſet, broke thro' the window, got out backwards, and narrowly eſcaped.

Laſt Saturday night between ten and eleven o'clock, a fire broke out in the work-ſhop of Mr. Laiden, tobacconiſt in Alderſgate-ſtreet, which ſoon communicated itſelf to a timber-yard behind it, belonging to Mr. Hatton; conſuming the greateſt part of the timber therein; from thence it took its courſe to Cook's hall, and ſeveral little tenements, which it entirely conſumed; and burnt with great fury till four o'clock yeſterday morning. Happily we are told no lives were loſt, nor do we hear of any perſonal accident, except one poor man, who had a large piece of timber fall on him, and was immediately carried to Bartholomew's hoſpital, and of whom there is great hopes of recovery.

On Wedneſday his majeſty appointed Thomas Sewell, Eſq; king's council, and member for the port of Winchelſea, to be maſter of the Rolls, in the room of Sir Thomas Clarke, deceaſed.

The ſame day Mr. Kearſley appeared at the court of King's Bench, Weſtminſter-Hall, to receive ſentence for originally publiſhing No. 45 of the North Briton; and he was ſent to the King's-Bench priſon till next term; when judgment is to be paſſed.

This morning one Francis Stoner having ſome words with a woman, at a public houſe in Vine-ſtreet, Clerkenwell, whom he had lived with ſome time paſt, as his wife, ſtabbed her in the breaſt with a caſe knife, of which wound ſhe ſoon after expired.

8. Yeſterday was held a court of common council at Guildhall, when the lord mayor opened the court with a ſhort but genteel ſpeech; aſſuring them, that he ſhould at all times be ready and willing, when deſired, to call courts of common-council, and to give his conſtant attendance upon city buſineſs; and ſhould, on all occaſions, be ready to do every thing in his power for the benefit and advantage of the city of London.

The following is a tranſlation of a letter, which (as we are aſſured from Poland by this day's Holland mail) has been written by the king of Great Britain to his Poliſh majeſty.

"S I R,

"IT was with great ſatisfaction I learnt "by your own letter the agreeable news, "that your majeſty had been elected king "and poſſeſſor of the throne of Poland.

"An election made ſo peaceably and ſo "unanimouſly, muſt one day enrich the "annals of that kingdom; and your ſubjects have the greateſt reaſon to promiſe "themſelves every thing from their ſove-"reign, who, in his private travels, hav-"ing ſeen the different courts of Europe, "and made himſelf acquainted with them, "will conſequently, be the better enabled "as a king to conduct his ſubjects, to "watch over their preſervation, and to de-"fend their laws and their liberties.

"The pleaſure I feel in recollecting the "Eſteem which I conceived for you in pri-"vate, increaſes that which I now have to "congratulate your majeſty on your ad-"vancement to the throne; and I take "this opportunity, with great fervency, "to

"to aſſure your majeſty of the ſincere "friendſhip, with which I am,

"Sir, your good friend and brother,

(Signed) GEORGE R.

St. James, 9 October 1764.

An account of the capitals at the Bank, South-Sea, and India houſes, as they ſtood, Nov. 24, 1764.

	£.
Bank Stock	10,780,000
4 per Cent. Conſ. An.	20,240,000
4 per Cent. 1763,	3,500,000
4 per Cent. Navy,	3,500,000
3 1 half per Cent. 1756,	1,500,000
3 1 half per Cent. 1758,	4,500,000
3 per Cent. Conſol.	33,627,821
3 per Cent. Reduced,	17,701,323
3 per Cent. 1726,	1,000,100
South Sea Stock	3,662,784
3 per Cent. Old An.	12,404,270
3 per Cent. New	8,958,255
3 per Cent. 1751,	2,100,000
India Stock,	3,200,000
3 per Cent. India An.	3,000,000
Total £.	129,674,553
Long Annuities, £.	248,250

The whole annual intereſt paid for the above ſum amounts to £. 4,815,738.

11. Yeſterday was heard before the lord high chancellor, in Lincoln's Inn hall, a moſt important cauſe, wherein a Yorkſhire lady was plaintiff, and J—— R——, a reputed Antinomian preacher, and others, were defendants. The cancelling of an annuity deed of 50 l. for the life of the defendant Reilly, fraudulently obtained by him without valuable conſideration, of a perſon labouring under a temporary enthuſiaſtical frenzy; and the refunding a conſiderable ſum of money, obtained under the like circumſtances, were prayed; when, after a full hearing of council, his lordſhip was pleaſed (to the extreme ſatisfaction of a crowded hall) to decree in favour of the plaintiff.

12. Yeſterday morning, about ten o'clock, came on in the Common Pleas at Weſtminſter, the trial between Mr. Beardmore and lord Halifax, which laſted till paſt ſix o'clock in the evening; when the jury, after withdrawing for three quarters of an hour, brought in their verdict for Mr. Beardmore, with 1500 l. damages. And this morning came on, the ſeveral trials of the Rev. Mr. Entick, Meſſrs. Fell and Wilſon, booksellers, and Mr. Meredith, clerk to Mr. Beardmore, plantiffs, and the earl of Halifax and others defendants; by four different juries; when the firſt gentleman had a verdict of 20 l. the ſecond of 10 l. the third of 40 l. and the laſt of 200 l. In relation to Mr. Beardmore's having 1500 l. damages given againſt the earl of Halifax, it ſhould be obſerved, that on a former trial he had a verdict of 1000 l. againſt the meſſengers, and that the verdict for the 1500 l. including the firſt 1000 l. by which the earl of Halifax is made liable to make good the verdict againſt the meſſengers. Mr. Entick had only 20 l. damages, as he had already received ſatisfaction for the 300 l. given in his cauſe againſt the meſſengers on a former trial.

14. Laſt night a fire broke out in a mill for grinding muſtard at Staines, which ſoon communicated to a corn mill adjoining, in which was a large quantity of wheat; both which were entirely conſumed.

18. Yeſterday morning Francis Stoner, for the murder of Elizabeth Antweezle, with whom he had cohabited ſome years, was executed at Tyburn. He behaved ſuitable to his unhappy ſituation. After execution his body was carried to ſurgeons hall for diſſection.

20. Yeſterday his royal highneſs the duke of Glouceſter was ſworn in one of his majeſty's moſt honourable privy council, and took his ſeat at the board accordingly.

Several copies of a ſmall printed tract, ſigned John Wilkes, Paris, Oct. 22, 1764, entitled, A Letter to the Worthy Electors of the Borough of Aylesbury in the County of Bucks: London printed for S— D—— in the Strand, were lately conveyed from France to ſome of the firſt perſonages in this kingdom.

Extract of Col. Draper's *Anſwer to the* Spaniſh *Arguments, claiming the Galleon, and refuſing Payment of the Ranſom Bills, for preſerving* Manila *from Pillage and Deſtruction.*

The Spaniſh Arguments *for refuſing Payment.*

THE Engliſh generals who made themſelves maſters of Manila propoſed, on the fifth of October, 1762, a capitulation to the archbiſhop, who acted as governor; by which they promiſed to preſerve the city from pillage, if the governor and principal magiſtrates would conſent to, and ſign the articles of, the ſaid capitulation; which they were forced to do, being threatened

threatened to be put to the ſword, in caſe of refuſal.

Notwithſtanding this ſhameful capitulation, extorted and ſigned by the means of violence and rigor, general Draper ordered or ſuffered the city to be ſacked and pillaged for forty hours, by four thouſand Engliſh, who plundered it of more than a million of dollars.

Therefore the ſaid capitulation ought to be void, becauſe it was ſigned by force; and becauſe general Draper firſt violated and broke the capitulation, by permitting the city to be pillaged. Conſequently, that capitulation only, which was propoſed by the governor, accepted of, and ſigned by admiral Corniſh and general Draper, upon the ſeventh of October, ought to be conſidered and reſpected in this affair.

The firſt article of which grants to the inhabitants of Manila, the peaceable and quiet poſſeſſions of all their effects; the fourth and ſixth grant them the liberty of commerce, under the protection of his Britannick majeſty.

REFUTATION.

It is a known and univerſal rule of war amongſt the moſt civilized nations, that places taken by ſtorm, without any capitulation, are ſubject to all the miſeries that the conquerors may chuſe to inflict.

Manila, my lord, was in this horrid ſituation; of conſequence the lives of the inhabitants, with all belonging to them, were entirely at our mercy. But chriſtianity, humanity, the dignity of our nation, and our own feelings as men, induced us not to exert the utmoſt rigours of the poſſeſſion, againſt thoſe wretched ſuppliants; although my own ſecretary, lieutenant Fryar, had been murdered, as he was carrying a flag of truce to the town. The admiral and I told the archbiſhop and principal magiſtrates, that we were deſirous to ſave ſo fine a city from deſtruction, ordered them to withdraw, conſult, and propoſe ſuch terms of compenſation as might ſatisfy the fleet and army, and exempt them from pillage, and its fatal conſequences.

The propoſals they gave in, were the very ſame, which the Spaniards moſt artfully call a ſecond capitulation; and were afterwards agreed to, and confirmed by us (with a few reſtrictions) but at that time were ſo unſuitable to their deſperate ſituation, that we rejected them as unſatisfactory and inadmiſſible. As conquerors, we took the pen, and dictated thoſe terms of the ranſom which the Spaniards thought proper to ſubmit to; for they had the alternative, either to be paſſive under the horrors of a pillage, or compound for their preſervative; they accepted the latter.

The objection and pretence of force and violence may be made uſe of to evade any military agreements whatſoever, where the two parties do not treat upon an equality; for who, in war, will ſubmit to an inconvenient and prejudicial compact, unleſs from force? But have the Spaniards forgot their own hiſtories? Or will they not remember the juſt indignation expreſſed againſt Francis the firſt, who pleaded the like ſubterfuge of force and violence, to evade the treaty made after the battle of Pavia, and his captivity?

Should ſuch eluſive doctrines prevail, it will be impoſſible, hereafter, for the vanquiſhed to obtain any quarter or terms whatſoever: the war will be carried on *uſque ad internecionem*; and if a ſovereign ſhall refuſe to confirm the conditions ſtipulated by his ſubjects, who are in ſuch critical ſituations, the conſequences are too horrid to mention.

By the ſame fallacious ſophiſtry, a ſtate may object to the payment of the ranſoms of ſhips taken at ſea, and to contributions levied in a country which is the ſeat of war. But it is always allowed, that in ſuch caſes, a part muſt be ſacrificed to ſave the whole, and ſurely, when by the laws of war we were entitled to the whole, it was a great degree of moderation to be contented with a part.

The deſtruction that we could have occaſioned, would have trebled the loſs they ſuffer by the payment of the ranſom. The rich churches and convents, the king of Spain's own palace, with its ſuperb and coſtly furniture, the magnificent buildings of every ſort, the fortifications, docks, magazines, founderies, cannon, and in ſhort the whole might have been entirely ruined, the Spaniſh empire in Aſia ſubverted, and the fruits of their religious miſſion loſt for ever, together with the lives of many thouſand inhabitants, who were ſpared by our humanity. As a ſuitable and grateful return for this lenity, the Spaniſh memorial affirms, that after the capitulation was ſigned, general Draper ordered or permitted, the city to be ſacked and pillaged for forty hours together, by four thouſand Engliſh, who plundered it of more than a million of dollars.

As my own character, both as an officer, and a man of honour, is ſo wickedly attacked by this unjuſt accuſation, I muſt beg leave to ſtate the whole affair, in its true light; and do appeal for its veracity to the teſtimonies of every officer and ſoldier, who

who ſerved in the expedition, and to all of the marine department.

We entered Manila by ſtorm, on the 6th of October, 1762, with an handful of troops, whoſe total amounted to little more than two thouſand; a motley compoſition of ſeamen, ſoldiers, ſeapoys, Cafres, Laſcars, Topaſees, French and German deſerters.

Many of the houſes had been abandoned by the frighted inhabitants, and were burſt open by the violence of ſhot, or exploſion of ſhells. Some of theſe were entered and pillaged. But all military men know, how difficult it is to reſtrain the impetuoſity of troops in the firſt fury of an aſſault, eſpecially when compoſed of ſuch a variety and confuſion of people, who differed as much in ſentiments and language, as in dreſs and complexion.

Several hours elapſed, before the principal magiſtrates could be brought to a conference; during that interval, the inhabitants were undoubtedly great ſufferers. But, my lord, this violence was antecedent to our ſettling the terms of the capitulations, and by the laws of war, the place, with all its contents, became the unqueſtionable property of the captors, until a ſufficient equivalent was given in lieu of it. That ſeveral robberies were committed, after the capitulation was ſigned, is not to be denied; for avarice, want, and rapacity, are ever inſatiable. But that the place was pillaged for forty hours, and that pillage authorized and permitted by me, is a moſt falſe and infamous aſſertion. The people of Manila, my lord, have impoſed upon their court, by a repreſentation of facts, which never exiſted; and to make ſuch a groundleſs charge, the reaſon for ſetting aſide and evading a ſolemn capitulation, is a proceeding unheard of until now, and as void of decency as common ſenſe.

The following extracts from the public orders, given out the very day we entered the town, will ſufficiently convince your lordſhip, of my conſtant attention to the preſervation of thoſe ungrateful people; who have almoſt taught me to believe, that humanity and compaſſion are crimes.

EXTRACTS.

October 6th, *Manila*.

"The utmoſt order and regularity to be obſerved.

"All perſons guilty of robberies, or plundering the churches and houſes, will be hanged without mercy.

"The guards to ſend frequent patroles both day and night, to prevent all diſorders.

"The drummers to beat to arms, the officers to aſſemble with their men, and call the rolls.

"The adjutants to go round the town, and take an exact account of the ſafe guards, poſted for the protection of the convents, churches, and houſes."

October 7th.

"All the inhabitants of Manila are to be looked upon and treated as his Britannick Majeſty's ſubjects: They having agreed to pay four millions of dollars, for the ranſom and preſervation of their city and effects.

"The criminals executed for robbery and ſacrilege, to be buried at ſun-ſet."

BIRTHS.

The lady of Joſeph Mawbey, Eſq; member of parliament for the borough of Southwark, of a daughter.—The lady of James Ambroſe, Eſq; deputy lieutenant of the county of Surry, of twins, both males.—Her grace the dutcheſs of Marlborough, of a daughter.—The lady of Matthew Skinner, Eſq; barriſter at law, of a ſon.

MARRIAGES.

At Birch-hall, near Colcheſter, John Keeling, Eſq; an eminent brewer at Clerkenwell, to Miſs Round, daughter of James Round, Eſq; of that place.—Richard Heron, of Lincoln's-Inn, Eſq; to Mrs. Thompſon of Lincoln's-Inn.—Saville Finch, Eſq; member of parliament for Malton, to Miſs Fullerton, daughter of John Fullerton, Eſq; of the county of Dorſet.—Capt. Smith, of the Clinton Indiaman, to Miſs Dance, daughter of Mr. George Dance, ſurveyor to the city of London.—Mr. Baker, of Covent Garden Theatre, to the amiable Miſs. Miller, of the ſame houſe.

DEATHS.

At Minorca, Colonel Craufurd, governor of that iſland.—Her grace the dutcheſs of Roxburghe, ſiſter to the hon. general Moſtyn.—At Bath, the hon. Mrs. Lowther, mother to Sir James Lowther, Bart. and to the preſent counteſs of Darlington.—Lady Amelia Hotham, daughter of Lady Hotham and neice to the earl of Cheſterfield.—The right Rev. Dr. George Stone, archbiſhop of Armagh, and primate of all Ireland.

P R O-

PROMOTIONS.

The earl of Thomond to be lord lieutenant and custos rotulorum of the county of Somerset, in the room of earl Poulett, deceased.—James Steuart, Esq; architect and painter, appointed serjeant painter to his majesty.—Henry Gladwin, Esq; to be lieutenant colonel in the army by brevet, for his gallant behaviour and sufferings in the defence of Detroit in North America against the savages.—Thomas Sandby, Esq; appointed steward to his royal highness the duke of Cumberland, in the room of Mr. Ford, deceased.—Robert Wood, Esq; member for Brackley, appointed groom-porter, in the room of Francis Buller, Esq; member for Westloe, deceased.—Montfort Browne, Esq; to be lieutenant-governor of West Florida in America.

BANKRUPTS.

Nov. 17. Richard Harding of Threadneedlestreet, London, vintner.—John Steward, of Knightsbridge in Middlesex, brewer.—James Appleton, of Frodsham in Cheshire dealer and chapman.—William Chaplain, of St. John Wapping, Middlesex, victualler.—Joel Harry, of Liverpool, shop-keeper.—William Walton, of Savage-Gardens, London, cornfactor.—James Murray, of Plymouth, linen-draper.—Elizabeth Vinter, of Huntingdon, innholder.—William Overend, of Bristol, merchant.

20. Mark Legg, of East-Carston in Berks, dealer.

24. Francis Tilley, otherwise Francis Albert Tilley, of St. Anne, Westminster, jeweller.—William Woodham, of the Strand, stationer.—John Heath, jun. of the parish of St. Mary de Crypt in Gloucester, innholder.—John Meecham, of White-Lion street, near Spital square, weaver.

27. John Murkins of Ely, in the isle of Ely, in the county of Cambridge, merchant.

Dec. 1. John Ireland, of King-street, St. Margaret, Westminster, Peruke-maker.—Hugh Rose, of East Cowes, in the Isle of Wight, merchant.—George Morris, late of Duke-street, Lincoln's inn fields, grocer.—John Pearce, of East Moulsey, in Surry, victualler.—Samuel Wells, of Addlethorpe, in Lincolnshire, dealer.

4. Henry Gardner, of St. Ann, Limehouse, mariner.—Charles Hart, of Richmond in Surry, grocer.

8. John Beardmore and Alexander Maistone, of Thames street, London, oilmen and partners.—Mary Blake, of Winchester, milliner and haberdasher.—James Warner Phipps, late of London, merchant.—John Jefferson, of Cheapside, London, brazier.—John Hamilton, of St. Giles's in the Fields, Middlesex, painter, glazier and broker.—Joseph Cawthorn, late of the Island of Madeira, but now of London, merchant (copartner with William Cawthorne.)

11. Sir Thomas Ridge, of Portsea, in the county of Southampton, knight, brewer, distiller, and wine-merchant.—Robert Maddern, of Bristol, linen-draper and merchant.—William Hill, of Little Walsingham, Norfolk, watch-maker, dealer and chapman.

15. Robert Forbes, of Chigwell, in Essex, dealer.—James Gregory the younger, of Lambeth, in Surry, innholder.

18. Thomas Hewson of St. James, Clerkenwell, salesman.—George Mills, of St. Margaret, Westminster, jeweller.

22. James Roberts, of Congleton, in the county of Chester, cheese-factor.—Robert Hall the younger, of the county and town of Nottingham, mercer.—William Bower, of the parish of Fulham, in the county of Middlesex, gardener.—Adam Dickson, late of James-street, in the parish of St. Paul, Covent-Garden, in the county of Middlesex, linen-draper.—Richard Reeves, of the parish of St. James, within the liberty of Westminster, in the county of Middlesex, victualler.

BILL *of Mortality from* Nov. 20. *to* Dec. 25.

Buried,			Christened,	
Males — 1225	} 2405		Males — 810	} 1556
Females 1180			Females 746	
Under 2 years old	666		Buried,	
Between 2 and 5	208		Within the Walls	196
5 and 10 —	116		Without —	567
10 and 20 —	86		*Midd.* and *Surry*	1205
20 and 30 —	219		City & Sub, *West.*	437
30 and 40 —	265			2405
40 and 50 —	284			
50 and 60 —	196			
60 and 70 —	182		Weekly, *Nov.* 27.	523
70 and 80 —	126		*Dec.* 4.	504
80 and 90 —	28		11.	531
90 and 100 —	8		18.	474
100 and 109 —	1		25.	374
	2405			2405

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THE GENERAL MAGAZINE OF ARTS and SCIENCES,

THE Gentlemen, who undertake the improvement *of this Magazine, have, among other Conſiderations, turned their Thoughts upon a Method to render that Part, allotted for* NEWS *only, more Striking, Entertaining, and Uſeful, than has hitherto been performed, either in this, or any other periodical Publication, which content themſelves with a confuſed Jumble of Articles, injudiciouſly collected from Weekly Journals, Chronicles, or Daily Papers; paying more Regard to Quantity, and the Conveniency of the Matter wanted to fill up ſuch a certain Part of their Work, than to the real Pleaſure and Advantages, to which it may be rendered ſubſervient. This Inattention may perhaps, in ſome Meaſure, account for throwing the News-Part heretofore at the End of their Magazines. But we ſhall provide this Treat for our Readers, at the very Entrance of Ours, as the propereſt Situation for ſuch Matters as moſt Men covet to read firſt, under the Title of*

The MONTHLY CHRONICLE, for *January*, 1765.

THE year 1765 opens with extraordinary reports, concerning the conduct of France and Spain, in regard to Great Britain and ourſelves; and with ſanguine expectations of vigorous reſolutions in the approaching Seſſions of Parliament.

The court of France, who ſtill put off the payment of the Canada Bills, and can't find money to diſcharge the debt ſtipulated by the late treaty of peace, for the maintenance of their priſoners, ſtick at no expence to carry their ſchemes into execution, contrary to the expreſs words and true intent and meaning of the ſaid treaty, by raiſing fortifications on the Miſſiſippi; ſupplying the Indians with ammunition, and encouraging them to render our conqueſts and trade in North America unprofitable and ineffective; by treacherouſly endeavouring to deprive us of our property in the Weſt-Indies, and by great preparations to the ruin of our trade on the coaſt of Africa.

The Spaniards talk big; they refuſe to pay the ranſom agreed upon for the iſland of Manila by the governor and his aſſociates; and that in a memorial and language unbecoming one crowned-head to give to another, and unfit to be received without due reſentment.

The Spaniſh *Arguments for refuſing payment.*

THE Engliſh Generals who made themſelves maſters of Manila propoſed, on the * fifth of October, 1762, a capitulation to the Archbiſhop, who acted as governor; by which they promiſed to preſerve the city from pillage, if the go-

* The Spaniards, by ſailing to Manila, by the weſt, are a day later in their computation of time in that country.

vernor and principal magiſtrates would conſent to, and ſign the articles of, the ſaid capitulation; which they were forced to do, being threatened to be put to the ſword, in caſe of refuſal.

Notwithſtanding this ſhameful capitulation, extorted and ſigned by the means of violence and rigor, General Draper ordered or ſuffered the city to be ſacked and pillaged, for forty hours, by four thouſand Engliſh, who plundered it of more than a million of dollars.

Therefore the ſaid capitulation ought to be void, becauſe it was *ſigned by force*; and becauſe General Draper firſt violated and broke the capitulation, by permitting the city to be pillaged. Conſequently, that capitulation only, which was propoſed by the governor, accepted of, and ſigned by Admiral Cornish and General Draper, upon the ſeventh of October, ought to be conſidered and reſpected in this affair.

The firſt article of which grants to the inhabitants of Manila, the peaceable and quiet poſſeſſion of all their effects; the fourth and ſixth grant them the liberty of commerce, under the protection of his Britannick Majeſty."

Refuted by Colonel Draper, *in a Letter to the Earl of* Halifax, *his Majeſty's Principal Secretary of State for the Southern Department.*

"*My Lord*,

"ARMED with that boldneſs which innocence inſpires, and the conſciouſneſs of having done my duty, both as an officer and a man of honour and humanity; I preſume again to lay before your Lordſhip my Anſwer to the *Spaniſh* Ambaſſador's memorial."

"I was in great hopes, that the good faith, honour, and punctuality of the *Spaniſh* nation, would have made this publication unneceſſary. But finding, that they have abſolutely refuſed payment of the Ranſom Bills, drawn upon their treaſury by the Governor of Manila, and do now claim the reſtitution of the Galeon, I am conſtrained, for the ſake of thoſe brave men, to whom I am obliged and indebted for my ſucceſs, to aſſert their rights, in the beſt manner I am able. . . . . .

"They vainly look up to me for that protection, which in their names, I again requeſt from your Lordſhip's good offices.

"I muſt add, that the calumnious and envenomed attack upon my own character, demands the moſt public juſtification: Being deſcribed both at home and abroad, as a man void of faith, principle, or common honeſty; and ſo, indeed, I ſhould be moſt deſervedly thought, were I guilty even of the ſmalleſt part of what the Spaniſh memorial accuſes me. A Dey of Tunis, or Algiers, would bluſh to make uſe of ſo black an inſtrument of perfidy and piracy. I owe, therefore, this open vindication of my conduct, both to my Sovereign, and to my country, whoſe repreſentatives were pleaſed to honour me with their public thanks, the greateſt of all rewards, and indeed the only one I have received for my late ſervices.—*Sed mihi facti fama ſat eſt.*

. . . . . .

"The Spaniards have aſſigned my breach of faith in the capitulation, as one reaſon for their refuſal of payment; I cannot, therefore, ſervilely ſtoop, or ſubmit to the heavy load of guilt, with which they have endeavoured to overwhelm me. . . . . .

Refutation.

"IT is a known and univerſal rule of war amongſt the civilized nations, that places taken by ſtorm, without any capitulation, are ſubject to all the miſeries that the conquerors may chuſe to inflict.

Manila, my Lord, was in this horrid ſituation; of conſequence the lives of the inhabitants, with all belonging to them were entirely at our mercy. But chriſtianity, humanity, the dignity of our nation, and our own feelings as men, induced us not to exert the utmoſt rigours of the poſſeſſion, againſt thoſe wretched ſuppliants; although my own Secretary, Lieutenant Fryar, had been murdered, as he was carrying a flag of truce to the town. The Admiral and I told the Archbiſhop and principal magiſtrates, that we were deſirous to ſave ſo fine a city from deſtruction, ordered them to withdraw, conſult, and propoſe ſuch terms of compenſation as might ſatisfy the fleet and army, and exempt them from pillage, and its fatal conſequences.

The

The propoſals they gave in, were the very ſame, which the Spaniards moſt artfully call a ſecond capitulation; and were afterwards agreed to, and confirmed by us (with a few reſtrictions) but at that time were ſo unſuitable to their deſperate ſituation, that we rejected them as unſatisfactory and inadmiſſible. As conquerors, we took the pen, and dictated thoſe terms of the ranſom, which the Spaniards thought proper to ſubmit to; for they had the alternative, either to be paſſive under the horrors of a pillage, or compound for their preſervation; they accepted the latter.

The objection and pretence of force and violence may be made uſe of to evade any military agreements whatſoever, where two parties do not treat upon an equality; for who, in war, will ſubmit to an inconvenient and prejudicial compact, unleſs from force? But have the Spaniards forgot their own hiſtories? Or will they not remember the juſt indignation expreſſed againſt Francis the firſt, who pleaded the like ſubterfuge of force and violence, to evade the treaty made after the battle of Pavia, and his captivity?

Should ſuch eluſive doctrines prevail, it will be impoſſible, hereafter, for the vanquiſhed to obtain any quarter or terms whatſoever: The war will be carried on *uſque ad internecionem*; and if a ſovereign ſhall refuſe to confirm the conditions ſtipulated by his ſubjects, who are in ſuch critical ſituations, the conſequences are too horrid to mention.

By the ſame fallacious ſophiſtry, a ſtate may object to the payment of the ranſoms of ſhips taken at ſea, and to contributions levied in a country which is the ſeat of war. But it is always allowed, that in ſuch caſes, a part muſt be ſacrificed to ſave the whole; and ſurely, when by the laws of war, we were entitled to the whole, it was a great degree of moderation to be contented with a part.

The deſtruction that we could have occaſioned, would have trebled the loſs they ſuffer by the payment of the ranſom. The rich churches and convents, the king of Spain's own palace, with its ſuperb and coſtly furniture, the magnificent buildings of every ſort, the fortifications, docks, magazines, foundaries, cannon, and in ſhort the whole might have been entirely ruined, the Spaniſh empire in Aſia ſubverted, and the fruits of their religious miſſion loſt for ever, together with the lives of many thouſand inhabitants, who were ſpared by our humanity. As a ſuitable and grateful return for this lenity, the Spaniſh memorial affirms, that after the capitulation was ſigned, General Draper ordered, or permitted, the city to be ſacked and pillaged for forty hours together, by four thouſand Engliſh, who plundered it of more than a million of dollars.

As my own character, both as an officer, and a man of honour, is ſo wickedly attacked by this unjuſt accuſation, I muſt beg leave to ſtate the whole affair, in its true light; and do appeal for its veracity to the teſtimonies of every officer and ſoldier, who ſerved in the expedition, and to all the marine department.

We entered Manila by ſtorm, on the 6th of October 1762, with an handful of troops, whoſe total amounted to little more than two thouſand; a motley compoſition of ſeamen, ſoldiers, ſeapoys, caffres, laſcars, topaſſes, French and German deſerters.

Many of the houſes had been abandoned by the frighted inhabitants, and were burſt open by the violence of ſhot, or exploſion of ſhells. Some of theſe were entered and pillaged. But all military men know, how difficult it is to reſtrain the impetuoſity of troops in the firſt fury of an aſſault, eſpecially when compoſed of ſuch a variety and confuſion of people, who differed as much in ſentiment and language, as in dreſs and complexion.

Several hours elapſed, before the principal magiſtrates could be brought to a conference; during that interval, the inhabitants were undoubtedly great ſufferers. But, my Lord, this violence was antecedent to our ſettling the terms of the capitulation, and by the laws of war, the place, with all its contents, became the unqueſtionable property of the captors, until a ſufficient equivalent was given in lieu of it. That ſeveral robberies were committed, after the capitulation was ſigned, is not to be denied; for avarice, want, and rapacity,

are ever insatiable! But that the place was pillaged for forty hours, and that pillage authorized and permitted by and, is a most false and infamous assertion. The people of Manila, my Lord, have imposed upon their Court, by a representation of facts, which never existed; and, to make such a groundless charge the reason for setting aside, and evading a solemn capitulation, is a proceeding unheard of until now, and as void of decency as common sense.

The Spaniards, at the same time, put on an appearance of resolution to back this affront with threats of beginning a new war against our ally the King of Portugal, by marching forces towards the frontiers of his Most Faithful Majesty's dominions.

Such measures and conduct, in those Courts, have produced resolutions and measures in our Cabinet, which, in time, will shew, that they who gave them peace with great generosity, are not afraid nor unable to renew the war, if driven to it by ingratitude and perfidy. The French Ministry disavow the proceedings of their Government in the West Indies, and palliate their intentions on the coast of Africa, with assurances that they will attempt nothing in that quarter of the world, contrary to the stipulations in the late treaty of peace, deny having any hand in the present disturbances in North America: And at last we have the agreeable news, that all their intrigues and efforts to disturb our peace by the way of the Mississippi, or the bay of St. Laurence, will soon prove abortive, and found impracticable: Of which we have a very sufficient prospect in a letter from the Hon. Major Gen. Gage, Commander in Chief of his Majesty's Forces in North America, to the Earl of Halifax, one of his Majesty's Principal Secretaries of State, dated at New-York the 13th of Dec. 1764, as follows.

"THE perfidy of the Shawnese and Delawares, and their having broken the ties, which even the Savage nations hold sacred amongst each other, required vigorous measures to reduce them. We had experienced their treachery so often, that I determined to make no peace with them, but in the heart of their country, and upon such terms as should make it as secure as it was possible. This conduct has produced all the good effects which could be wished or expected from it. Those Indians have been humbled, and reduced to accept of peace upon the terms prescribed to them, in a manner as will give reputation to his Majesty's arms amongst the several nations. The regular and provincial troops, under Col. Bouquet, having been joined by a good body of volunteers from Virginia, and others from Maryland and Pennsylvania, marched from Fort Pitt the beginning of October, and got to Tuscarowas about the 15th. The march of the troops into their country, threw the Savages into the greatest consternation, as they had hoped their woods would protect them, and had boasted of the security of their situation from our attacks. The Indians hovered round the troops during their march, but despairing of success in an action, had recourse to negotiation. They were told that they might have peace, but every prisoner in their possession must first be delivered up. They brought in near twenty, and promised to deliver the rest; but as their promises were not regarded, they engaged to deliver the whole on the 1st of November, at the Forks of the Muskingham, about 150 miles from Fort Pitt, the center of the Delaware towns, and near to the most considerable settlement of the Shawnese. Col. Bouquet kept them in sight, and moved his camp to that place. He soon obliged the Delawares, and some broken tribes of Mohikons, Wiandots, and Mingoes, to bring in all their prisoners, even to children born of white women, and to tie those who were grown as savage as themselves, and unwilling to leave them, and bring them bound to the camp. They were then told that they must appoint Deputies to go to Sir William Johnson, to receive such terms as should be imposed upon them, which the nations should agree to ratify: And for the security of their performance of this, and that no further hostilities should be committed, a number of their Chiefs must remain in our hands. The above nations subscribed to these terms; but the Shawnese were more obstinate. They did not

not approve of the conditions, and were particularly averse to the giving of hostages: But finding their obstinacy had no effect, and would only tend to their destruction, the troops having penetrated into the heart of their country, they at length became sensible, that there was no safety but in submission, and were obliged to stoop to the same conditions as the other nations.

They immediately gave up forty prisoners, and promised the rest should be sent to Fort Pitt in the Spring. This last not being admitted, the immediate restitution of all the prisoners being the sine qua non of peace, it was agreed, that parties should be sent from the army into their towns, to collect the prisoners, and conduct them to Fort Pitt. They delivered six of their principal Chiefs as hostages, into our hands, and appointed their Deputies to go to Sir William Johnson in the same manner as the rest. The number of prisoners already delivered exceeds two hundred, and it was expected that our parties would bring in near one hundred more from the Shawnese towns. These conditions seem sufficient proofs of the sincerity and humiliation of those nations: And, in justice to Col. Bouquet, I must testify the obligations I have to him; and that nothing but the firm and steady conduct which he has observed in all his transactions with those treacherous Savages, would ever have brought them to a serious peace.

I now flatter myself, that the country is restored to its former tranquility, and that a general, and, it is to be hoped, lasting Peace, is concluded with all the Indian nations, who have taken up arms against his Majesty."

How far our ministry will resent the Spanish memorial above-mentioned, may be conjectured from a current report, that letters of reprisals will be granted to the captors, and that they will be fitted out at the national expence to recover their right, and to disburse the expences that may arise from this act of necessity, provided Spain shall continue obstinate, and not pay a stipulated ransom for the Manilas. However this may be; the Edgar is ordered to sail in company with the Shannon and Hound to the coast of Guinea, to demolish a fort called Abraka, which the French have erected opposite to ours in the river Gambia; the is not to touch at the English settlements at all, but after calling at Cape Coast and Anamaboo, make the best of her way back.

The other states in Europe seem to be intent upon such measures only, as give no umbrage of hostility to their neighbours, and calculated to make the most advantage of an universal peace.

At Vienna their time seems totally taken up with marriages. In Poland the new King is busy in settling the Government, and rewarding his friends. In Denmark, trade, cultivation of the land, and manufactures, make the chief part of his Majesty's attention; whose august house is shortly to be aggrandized with the additional lustre of a British Princess to a Prince of Denmark. In Germany every state is repairing the destruction brought upon their respective lands and farms by the last war. The King of Prussia and the Czarina only keeping up powerful armies against all events, that may be designed to disturb the tranquility of the north, by the intrigues of those Potentates, who were not satisfied with the disposal of the Crown of Poland; and to be ready to counteract any secret measures of the Ottoman Ministry on Poland or Russia.

The states of Italy are all quiet, except the Republic of Genoa, whose troubles in Corsica have again obliged them to call in the aid of France, in order to reduce their rebellious subjects on that island to their obedience. This at first gave umbrage to certain powers. But the treaty for French auxiliaries being reduced to such a temperature, as to carry their conditions and stipulations no further than a mercenary aid, without any interest to France, in the conquests her troops may make in Corsica, it has been suffered to take effect: and accordingly the French troops are landed on that island.

In the mean time all the world seem attentive to the proceedings of the British Parliament, which was prorogued to the 10th of this month, and which was opened by the following Most Gracious Speech, by his Most Sacred Majesty K. George III. from the throne:

My

My Lords, and Gentlemen,

THE ſituation of affairs, both at home and abroad, has enabled me to allow you that receſs, which has been uſual in times of public tranquility.

I have now the ſatisfaction to inform you, that I have agreed with my good brother the King of Denmark, to cement the union which has long ſubſiſted between the two crowns, by the marriage of the Prince Royal of Denmark with my ſiſter the Princeſs Caroline Matilda, which is to be ſolemnized as ſoon as their reſpective ages will permit.

I obſerve, with pleaſure, that the Events, which have happened in the courſe of the laſt year, give us reaſon to hope for the duration of that peace, which has been ſo happily eſtabliſhed, and which it is my reſolution ſtrictly to maintain. The courts of France and Spain have given me freſh aſſurances of their good diſpoſitions. The future quiet of the empire has been confirmed by the unanimous choice of a ſucceſſor to the imperial dignity; and the peaceable election of the King of Poland has prevented thoſe fatal conſequences, which, upon ſimilar occaſions, have ſo frequently been deſtructive to the repoſe of Europe. I am happy, therefore, to meet my Parliament at a time, when no foreign diſturbances interrupt their conſultations for the internal good order, and proſperity of my kingdoms.

Gentlemen of the Houſe of Commons.

I ſhall aſk of you, for the current ſervice of the year, no other ſupplies than ſuch as are neceſſary for thoſe eſtabliſhments, which have already met with your approbation; and I will order the proper eſtimates for this purpoſe to be laid before you.

I muſt, however, earneſtly recommend to you the continuance of that attention, which you have hitherto ſhewn, for the improvement of the public revenue, and the diminution of the national debt. For theſe deſirable and neceſſary ends, I am perſuaded, that you will purſue every proper meaſure which the ſtate of my dominions, and the circumſtances of the times, may require.

My Lords, and Gentlemen.

The experience which I have had of your former conduct, makes me rely on your wiſdom, and firmneſs, in promoting that obedience to the laws, and reſpect to the legiſlative authority of this kingdom, which is eſſentially neceſſary for the ſafety of the whole; and in eſtabliſhing ſuch regulations, as may beſt connect and ſtrengthen every part of my dominions, for their mutual benefit and ſupport.

The affection which I bear to my people excites my earneſt wiſhes, that every ſeſſion of parliament may be diſtinguiſhed by ſome plans for the public advantage, and for their relief from thoſe difficulties, which an expenſive war has brought upon them. My concurrence and encouragement ſhall never be wanting where their welfare is concerned; And I truſt that for the attainment of that great object, you will proceed with temper, unanimity, and diſpatch."

For which both Houſes of Parliament unanimouſly voted their thanks and addreſſes. After which the Parliament proceeded to do buſineſs. And in purſuance of one part of the ſaid ſpeech, preparations are already making for completing the marriage therein mentioned.

The city of London, in the beginning of this month, was greatly agitated by the death of Sir Thomas Harriſon, Knt. Chamberlain and Receiver-General of the Land Tax for the ſaid city and county of Middleſex.

There immediately appeared Mr. Alderman Turner, Mr. Deputy Ellis, the late Deputy Long, Mr. Samuel Freeman, and Mr. Stracey Till, as candidates for the important office of Chamberlain of the city of London, which is in the gift of the Liverymen. The place of Receiver is in the Crown. To this liſt one Mr. Bonus did afterwards add his name, and petitioned the votes and intereſt of his fellow-citizens, with a promiſe to diſcover a ſecret, by which the ſaid office could be much augmented in its value, and the city alſo enriched. At laſt there appeared Alderman Janſſen, who had been chief magiſtrate of this metropolis, and had repreſented the city of London with dignity in parliament: But had, by unavoidable misfortunes and loſſes in trade, been reduced to almoſt a ſtate of obſcurity. This Gentleman no ſooner declared

declared himſelf a candidate, than his grateful fellow-citizens gave him the preference in their election. For though a poll was demanded, after holding up of hands for each candidate above-mentioned, at which time Mr. Janſſen was declared to have the majority, and great intereſt was made by the particular friends of thoſe that ſtood the poll, who were Alderman Turner, Deputy Ellis, Mr. Freeman, and Mr. Till, againſt Mr. Alderman Janſſen; Mr. Ellis and Mr. Freeman gave up on the ſecond day's poll, and Mr. Alderman Turner and Mr. Till on the third day; ſo that Mr. Ald. Janſſen was declared duly elected, and was ſworn into that great office of Chamberlain on Tueſday the 29th, notwithſtanding the acrimony and inveteracy with which Scurrility attacked that Gentleman, which, tho' deſign'd to derogate from his merit, gave him the beſt opportunity to clear up and enforce certain particulars relating to his conduct before the Public, which turned infinitely to his advantage.

On the 12th the Seſſions began at the Old Bailey, which afforded the remarkable trial of the parties, who robbed Lord Harrington's houſe in the beginning of Dec. 1763, and had been purſued but not found out and ſeized till a little before Chriſtmas laſt. There were three concerned in this robbery, John Weſkett, James Cooper, and John Bradley. It appears that Weſkett, my Lord's porter, was the principal and firſt mover of this robbery, and engaged Bradley in the villainous act: And that Cooper, who kept a chandler's ſhop in Little Turn-ſtile, Holborn, was the receiver, and at whoſe houſe Bradley uſed to lodge.

This dark affair was traced out by a note of 30l. that was a part of the things ſtolen, and uttered by Bradley at Cheſter Fair, to an Iriſh factor for linnen. In tracing this note, it was found to be uttered by Bradley, Weſkett's boſom friend.

On theſe circumſtances, a warrant was iſſued againſt John Bradley; for the more ſpeedy execution of which, Mr. Cooper, chandler, in Little Turn-ſtile, his late landlord, was ſent for, who informed the juſtice, that Bradley had left his houſe above ſix weeks; and that he knew not where he went to, when he went from him; upon which, Bradley was the next day publicly advertiſed, hand-bills were diſperſed all over the kingdom, perſons planted at all the alehouſes he uſed to frequent, and every other method uſed to apprehend him.

Theſe ſteps produced a man, who accidentally heard one William Bradſhaw, a coachman, who drives a jobb, at Gerrard's Hall-Inn, ſay, (in an alehouſe) that he had got a large cheſt of the ſaid Bradley's, in his hay loft: on this information, the cheſt and coachman was ſoon brought before the juſtice; and this cheſt contained three packs of linen cloth, bought at Cheſter: and one of them exactly anſwered the deſcription in Beath's letter, together with the cloaths he wore when he bought it; but nothing of Lord Harrington's was found in the cheſt. This coachman ſaid, that he knew Bradley; that the cheſt, in his cuſtody, was brought in a coach about ſix weeks ago, from Cooper's houſe, in Turnſtile.

Upon this, Cooper was again ſent for; and readily acknowledged what he had before obſtinately denied, *viz.* That he knew of the ſaid cheſt going from his houſe, to Gerrard's Hall-Inn; and the concealing of this circumſtance at his firſt examination, was the cauſe of Bradley's eſcape; for it afterwards appeared, that he was at Gerrard's Hall-Inn the very next morning; and it appeared, that about the time Lord Harrington's houſe was robbed, he failed in his buſineſs as a cheeſemonger, in Ratcliff-highway; ſince which time, he had got a houſe and ſhop in Turnſtile, well-ſtocked; and that he ſold coals, &c.

The Juſtice then, threatened to commit him to priſon as an acceſſary, after the fact was made out: upon which Cooper opened himſelf in the following declaration, *viz.* That he knew John Weſkett and John Bradley had committed the robbery, and for that John Bradley told him, the very day preceding the night of the robbery, that he had a ſecret to tell him, which, if he divulged, he would blow his brains out; and then on a ſolemn promiſe of ſecrecy, he told him that John Weſkett, then porter to Lord Harrington, had agreed to let him in at night, and conceal him till the family were quiet, and deſired the ſaid Cooper to fit up for him.

That

That about three o'clock in the morning, the ſaid Bradley returned to his houſe, and brought ſeveral gold ſnuff-boxes, a repeating watch, a ſilver candleſtick, a ſilver ink-ſtand, &c. together with a large ſum of money in gold: that he ſaw Bradley count the money the next morning; and that he buried the gold boxes and watch, &c. &c. in a hole in his cellar, where they ſtill remained.

Upon this diſcovery, a ſearch was made in the ſaid cellar, and the goods found buried there, and were afterwards ſworn to by his Lordſhip. Cooper was then committed as an acceſſary, for further examination.

Soon after this, *viz.* John Bradley was apprehended, at the Crooked Billet, in Wapping, in a ſailor's habit, which finiſhed this work; and the next day was examined before Sir John Fielding; when hearing Cooper's attempt to become evidence againſt him and Weſkett, deſcribed every minute circumſtance attending the robbery of his Lordſhip's houſe, as appears by his evidence on the trial, which declaration being ſo voluntary, excited the compaſſion, as well of the magiſtrate, as of thoſe concerned, who expreſſed their ſenſe of Weſkett and Cooper being the greater villains, and the abſolute impoſſibility of Bradley's effecting the robbery without Weſkett's aſſiſtance. *

* Bradley was admitted an evidence againſt them, who upon their trial at the Old Bailey were capitally convicted.

PROMOTIONS.

LIEUT. Robſon, to the 70th reg. of foot.—Algernoon Warren, Eſq; to be Captain,—John Barcus, Gent. to be Capt. Lieut.—Phillip Conner, to be Lieut. in the 66th reg. of foot.—Wm. Norton, Eſq; Miniſter to Swiſs Cantons.—Rev. Mr. Rumney, to the living of Hexam.—Daniel Rea, Eſq; to be Capt. in the 21ſt reg. of foot.

MARRIAGES.

HARRY Gold, Eſq; to Miſs Hannah Lee.—Mr. Thn. Nottidge, to Miſs Wall.—Abraham Prawle, to Miſs Polly Kendrick.—Ja. Horton, Eſq; to Miſs Eliz. Fountain.—Rev. Mr. Prentice, to Mrs. Field.—Rich. Reynolds, Eſq; to Miſs Patty Edmondſon.—Rob. Lely, of Lincoln, to Miſs Gates.—Wadſworth Buſk, Eſq; to Miſs Alice.—Mr. Tho. Lamb, of Cornhill, to Miſs Biſhop.—Mr. Low, of Liverpool, to Miſs Croſbie.—Henry Penton, Eſq; Member for Wincheſter, to Miſs Knowler.—Johnſon Atkinſon, M. D. to Miſs Buſfield.—M. Demay, of Paris, to Miſs Mulard, of Oxenden-ſtreet.—Mr. Samuel Male, to Miſs Anna Maria Margaretus Skynner.

DEATHS.

MR. Floyd, of Broſely, burnt.—Mr. Abr. Denton, Attorney.—David Winter, Eſq;—Lady of J. Kent, Eſq;—Mr. Geo. Kriſpe, Goldſmith.—Mr. Fairweather, in the Strand.—Mr. Sam. Anderſon.—John Newman, Eſq; of Mairefield.—Mr. Tho. Catlet, Attorney.—Francis Melvil, of Hackney, Eſq;—Mr. Vagner, his Majeſty's hatter.—Mr. James Frye, of Swallow-ſtreet.—Mr. Mead, of Billerica, Eſſex.—Miſs Jackſon, of Southgate.—Mr. John Bland, of Fetter lane.—Mrs. Frances Byrd.—Ch. Whitfield, Eſq;—Rowland Humphries, Eſq;—John Finerſon, Eſq;—Col. Forteſter.—John Chaſener, of Stoke Park, Eſq;—Simon Stanton, Attorney at Law.—Mr. William Bennet, of Stratford.—Mr. Joſeph Harris, Mercer.—Robert Andrews, of Hexam, Eſq;—John Elton, Attorney at Law.—Hon. Ridgeway Pitt, Earl of Londonderry.—Rigby Molyneux, Eſq;—Joſeph Wintle, Eſq;—Col. Dugald Campbell.—Tho. Miller, Eſq; Receiver General for Eſſex.—Daniel Lambert, Eſq. in Savage-gardens.

Liſt of NEW BOOKS and PAMPHLETS.

REmarks on the Budget, 6d.

An eſſay on the education of children, in two parts, 3s.

An elegy to the memory of the late Right Hon. William Earl of Bath, 1s. 6d.

The Whig, a burleſque ſatirical poem, 1s. 6d.

A letter to the Public, containing ſome important hints relating to the Revenue, 6d.

The Converſion of St. Paul, a poetical eſſay, by John Lettice, M. A. 1s.

Churchill defended, 2s.

The Patriot Muſe, 1s. 6d.

Conſiderations on the legality of general warrants, and the propriety of a Parliamentary Regulation of the ſame, 1s.

Oriental Apologies; or, Inſtructive Fables, 2s. 6d.

An Addreſs to both Parties, 6d.

Conſiderations which may tend to promote the ſettlement of our new Weſt India Colonies, by encouraging individuals to embark in the undertaking, 1s.

To the PROPRIETORS *of the* GENERAL MAGAZINE.

GENTLEMEN,

YOUR late engagement, upon the improved plan, to embelliſh your collection with the flowers of Literature and Belles Lettres, has gained you a new correſpondent, who deſires your acceptance of the following pieces, as an earneſt of his approbation of your ſcheme, and of his real intention to promote ſo uſeful and entertaining a *Magazine*. W.

INSTRUCTIONS *for* CONVERSATION.

CONVERSATION is the alternate or mutual communication of thoughts, by ſpeaking to one another; which, though it muſt be granted, is not to be reduced to rule in every circumſtance and condition of men and things; yet there are many advantageous hints, that may be improved to render it agreeable, and to prevent the bad *effects* of its abuſe.

Firſt, There ſhould be a certain *politeneſs* in Converſation. This ingredient gains upon the affections of the hearer; it conciliates love, and recommends a perſon to company more than any other attainment; and is the beſt antidote to that reigning vice, Envy, which can't bear any one of extraordinary parts; but is at a loſs how to attack a polite converſation: And the greater any one may be, as to his talents for converſation, ſo much more ſhould he ſtudy to improve in politeneſs. Extraordinary gifts don't intitle any one to behave with incivility, but to treat all mankind with greater civilities; and we ſhall always find our intereſt in endeavouring to pleaſe, rather than to ſhine in converſation.

Secondly, Converſation ſhould be adapted to the taſte, character, and preſent humour of the perſons, with whom we *converſe*. This is the true effect of Politeneſs; but it meets with many obſtacles, where there is not found a large fund of good-nature and complaiſance.

Thirdly, We muſt not force nature. Every one ought to follow his natural talent in converſation; and to take care not to paſs the bounds of his own knowledge and underſtanding. It is to a want of this caution, that we ſometimes ſee a man of merit in other particulars belonging to his ſtation, appear like a coxcomb, and hear a man of genius talk like a fool.

Avoid diſputes as much as poſſible. When it is out of your power to prevent a debate, enter the liſts cooly; give your reaſons with conciſeneſs and modeſty: This will recommend you to the hearers, and furniſh you with a good retreat, in caſe of a pinching argument: For he that does not deliver his opinion in a dogmatical and conceited way, may, with a good grace, ſay, I am never poſitive, and am now glad to be better informed, when he cannot proceed in an argument. Thus the Diſciples of *Socrates* were wont to reaſon, who made it a rule ſcarce to affirm any thing, to prevent their being caught in an abſurdity; and ſeemed only to

desire information from the man, whom they were endeavouring to bring over to their opinion. He that contends for the honour of victory alone, cannot make a more false step, or give his antagonist a greater advantage over him, than falling into a passion. Nothing can be more ridiculous and unjust, than to be angry with another, because he is not of my opinion. If he is not endowed with the same gifts of nature and education as I am, it is my duty to be thankful for those abilities, but it is unjust to be angry with one, who ought rather to be the object of my pity.

If you propose no more than information, and to search after truth, it does not signify where you find it. And when you have gained a victory, do not push it too far: It will be much more conclusive to let the company and your adversary see it is in your power, but that you are too generous to make use of it.

Fourthly, It is abominable to engross all the talk in company, or to talk much of ourselves and our own domestic affairs: Neither will a prudent man talk much of any particular science, for which he is remarkably famous; but follow the example of *Mr. Cowley*, who was so reserved, as to his own abilities, that none but his intimate friends ever discovered he was a great poet, by his discourse.

The old proverb should be well inculcated, *Vir sapit, qui pauca loquitur*. He that is silent on a subject, where every one is satisfied he could speak well, will often be thought no less knowing in other matters, where perhaps he is wholly ignorant.

Fifthly, Commend not, without adding reasons for so doing; and offend not a company with unintelligible raillery, nor by asking questions, and stating doubts that can give no real pleasure to your companions.

Nothing can be more silly, than the pleasure some people take in what they call Speaking their minds. A man of this turn of mind will not scruple to say a rude thing, for the mere pleasure of saying it; when an opposite behaviour, full as innocent, might have preserved his friend, or made his fortune.

Lastly, As we are told, by the highest authority, That evil communication corrupts good manners; so there is a something in conversation that can never be learnt, but in the company of the polite. The virtues of men are enticing, as well as their vices.

A SPEECH *on the* Death *of* LUCRETIA.

By JUNIUS BRUTUS.

ROME was governed by Kings for 240 years, and upwards, till the expulsion of *Tarquin* the *Second*, whose son *Sextus* ravished LUCRETIA, the wife of *Collatinus*, a noble Roman. *Lucretia* thus injured, sent for her husband, then in the camp with *Tarquin*, at *Ardea*; and having informed him and several friends of the outrage she had received, first engaged them to revenge it, and then stabb'd herself to the heart, and died before them. *Junius Brutus*, who knew that his fellow-subjects would be glad to lay hold of the occasion to deliver themselves from the tyranny and cruelty

of

of the Tarquins, advanced to the dying lady, drew the poniard out of her breast, and shewing it all bloody to the spectators, he addressed them in the midst of their surprize and resentment.

"Yes, noble Lady, I swear by this blood, which was once so pure, and which nothing but royal villainy could have polluted, that I will pursue Lucius Tarquinius the Proud, his wicked wife, and their children, with fire and sword: Nor will I even suffer any of that family, or of any other whatsoever, to be King in Rome. Ye Gods! I call you to witness this my oath! Here, Romans, turn your eyes to that sad spectacle—the daughter of Lucretius, Collatinus's wife—She died by her own hand. See there a noble Lady, whom the lust of a Tarquin reduced to the necessity of being her own executioner, to attest her innocence. Sextus, hospitably entertained by her as a kinsman of her husband, the perfidious guest became her brutal ravisher. The chaste, the generous Lucretia, could not survive the insult. Glorious woman! but once only treated as a slave, she thought life no longer to be endured. Lucretia, a woman, disdained a life that depended on a tyrant's will; and shall we, shall men, with such an example before our eyes, and after five and twenty years of ignominious servitude; shall we, thro' a fear of dying, defer one single instant to assert our Liberty! No, Romans! now is the time: The favourable moment, we have so long waited for, is come.—Tarquin is not at Rome.—The Patricians are at the head of the enterprize. The city is abundantly provided with men, arms, and all things necessary. There is nothing wanting to secure success, if our own courage does not fail us:—And shall those warriors that have ever been so brave, when foreign enemies were to be subdued, or when conquests were to be made to gratify the ambition and avarice of Tarquin, be then only cowards, when they are to deliver themselves from slavery? Some of you, perhaps, are intimidated by the army, which Tarquin now commands. The soldiers, you imagine, will take the part of their General.—Banish so groundless a fear. The love of Liberty is natural to all men. Your fellow-citizens in the camp feel the weight of oppression with as quick a sense as you that are in Rome: They will as eagerly seize the occasion of throwing off the yoke. But let us grant there may be some amongst them, who, through baseness of spirit, or a bad education, will be disposed to favour the Tyrant: The number of these can be but small; and we have means sufficient in our hands to reduce them to reason. They have left us hostages more dear to them than life. Their wives, children, fathers, and mothers, are here in the city. Courage, Romans! the Gods are for us: Those Gods whose temples and altars the impious Tarquin has profaned, by sacrifices and libations, made with polluted hands, polluted with blood, and with numberless unexpiated crimes committed against his subjects. Ye Gods, who protected our fore-fathers; ye Genii, who watch for the preservation and glory of Rome, do ye inspire us with courage and unanimity in this glorious cause; and we will, with our last breath, defend your worship from all profanation."

ADVICE TO YOUNG AUTHORS.

IT is a just and general observation, That too great a self-love and confidence have insensibly stolen upon the wits of this and former ages. May I advise you, young men, to shun this, as the worst of pests. Let us banish it from us, and think lowly of ourselves. Let us measure ourselves and our performances, by our own foot and standard; and not believe any thing that is great of ourselves, beyond what we are truly conscious of to ourselves. Modesty is it, which becomes every age, and leads all that follow her in the strait and right path to solid virtue. Without Modesty we are hurled down precipices; and, instead of acquiring honour, become the scorn of men; instead of good fame, we return loaden with ignominy and contempt.

This was well understood by Pliny, who not trusting to his own judgment, very often, or rather always, desired the opinion and advice of others before he would publish his compositions. "Being (says he) to recite a small oration, which I intend to publish, I called together some, that I might fear them, but not many, that I might know the truth:" And again he writes, "I omit no sort of emendation; for first I consider very diligently with myself, what I have written; then I read it to two or three; then I deliver it to others, to be noted; and as to their notes, if I doubt, I consider them with one or two more; and, at last, I recite it to many." A most excellent custom; and most wanted in this scribbling age; when both the Learned and Unlearned write on and on, and we read so many feeble, dry, jejune, and undigested pieces, sent thro' the press into the world. How useful would it be to restrain the over-hasty and dissolute wits of some, and direct others! For as an ancient father observes, "You shall rarely find a man, who is not deceived by his own writings; they slip by him with many faults not perceived; and, as deformed children are yet dear to their own parents, so undecent discourses please their writers."

DODWELL.

COMMERCIAL DUTIES.

IN the moral world, as it now exists, nothing can be more worth our attention, than to consider our *commercial connections*, which arise from the wants and weaknesses of mankind, and from the various circumstances in which their different situations place them; from which connections result the duties of Justice, Fair Dealing, Sincerity, Fidelity to agreements, and the like.

As the wants of mankind are many, and the single strength of individuals small, they could hardly find the necessaries, and much less the conveniencies of life, with uniting their ingenuity and strength in acquiring these, and without a mutual intercourse of good offices. Some men are better formed for some kinds of ingenuity and labour, and others for other kinds; and different soils and climates are enriched with different productions; so that men, by

by exchanging the produce of their respective labours, and supplying the wants of one country with the superfluities of another, do, in effect, diminish the labours of each, and encrease the abundance of all.

This is the foundation of all commerce, or exchange of commodities and goods, from one with another; in order to facilitate which, men have contrived different species of coin or money, as a common standard, by which to estimate the comparative values of their respective goods. And to render this commerce sure and effectual, the forementioned duties are absolutely necessary. For *Justice*, or *Fair Dealing*, or, in other words, a disposition to treat others as we would be treated by them, is the cement of Society, or that pervading spirit, which connects its members, inspires its various relations, and maintains the order and subordination of each part to the whole. Without this, Society would become a den of thieves and banditti; hating and hated, devouring and devoured, by one another.

Sincerity and Veracity in our words and actions, is another bond of mutual intercourse, and the foundation of mutual trust. It includes a conformity of our words with our sentiments; a correspondence between our actions and dispositions; a strict regard to truth; and an irreconcileable abhorrence to falshood. It does not require us to expose our sentiment indiscretely, or tell all the truth in every case; but it does not, it cannot, admit the least violation of the truth, in contradiction to our sentiments. For if these bounds be once passed, no possible limit can be assigned where the violation shall stop, and no pretence of private, or public good, can possibly counterballance the bad consequences of such a violation.

Fidelity and Promises, Covenants and Engagements, is another duty, so essential to the security of commerce, that Society would soon grow intolerable without the strict observance of it.

A *Promise* is a voluntary declaration by words, or by an action equally significant, of our resolution to do something in behalf of another, or for his service. When it is made, the person, who made it, is by all supposed to be under an obligation to perform it; and he, to whom it is made, may demand the performance as his right.

Fair Dealing and Fidelity to compacts, require that we take no advantage of the ignorance, passion, or incapacity of others, from whatever cause that incapacity ariseth; that we be explicit and candid in making bargains; and just and faithful in fulfilling our part of them. And if the other party violates his engagements, redress is to be sought from the laws, or from those, who are entrusted with the execution of them.

Thus the commercial virtues and duties require, that we not only do not invade, but maintain the rights of others; that we be fair and impartial in transferring, bartering or exchanging property, whether in goods or service, and be inviolably faithful to our word and to our engagements, where they are not criminal, nor extorted by force.

The

The MARTYRDOM *of King* CHARLES I.

With a Copper-plate *of the* WARRANT *for his* EXECUTION; *and a Perfect View of the* SCAFFOLD *and* EXECUTION.

THE 30*th of* January *being appointed a Day of* Faſting *yearly, in Remembrance of the murder of King* CHARLES I. *by a pretended* Court of Juſtice; *and the true intent of keeping up that Day of Faſting being, perhaps, little underſtood by ſome, and totally neglected by others, which may be attributed to the violence and zeal of Parties; one of whom, place him in the order of the greateſt Saints, and the other will ſcarce allow him to deſerve the character of an honeſt man; I have endeavoured, by ſteering clear of both parties, to lay before the Public this ſingular tranſaction, in ſuch a manner, as to explain the real intention of the Legiſlature for this ordinance, and not give offence to either party, but with hopes to reconcile them, at leaſt in this one grand point; That, tho' King* CHARLES I. *had been guilty of what was laid to his charge, he was* illegally *put to death.*

In this example of King-killing, under the maſk of Juſtice, we may make theſe reflections. As our rights, liberties, and properties, are ſecured to us by the laws; ſo there can't be any where ſuch comfortable and ſafe living, as where juſt laws are put in execution by righteous Judges. But when the ſenſe and true meaning of the laws is perverted; when they are made uſe of contrary to their ends and deſigns, to ſerve wicked purpoſes; when they are managed by corrupt Judges, or ſeized by unjuſt Powers; then what was intended for our ſecurity, becomes our deſtruction; and not only mens liberties and eſtates, but their very lives, are taken away, under the plea and colour of thoſe laws, which were originally and truly deſigned for their protection and preſervation. Again, nothing hath a greater, or more powerful influence on the affairs of human life, than Religion, as that which affects not only their preſent concern, but their future and eternal welfare; ſo that did Religion, in its truth and power, poſſeſs mens ſouls, it would have that effect upon their lives and actions, that they would be a conſtant comfort, ſuccour and aſſiſtance, to each other; and ſo careful and tender would they be of one another's good, that it would bring down a kind of heaven upon earth: But when once ill principles are imbibed under the notion of *Religion*, inſtead of cooling mens heats, it ſets them on fire; no ſtop can be put to the moſt outragious proceedings; for thoſe zealots glory in the moſt horrid villanies, as carrying on God's cauſe; and really poſſeſs themſelves with an opinion, "That the killing even the beſt of men is doing him ſervice." There can be nothing more barbarous and bloody-minded than a *mad zealot*.

Thus, here you ſee a King, a King of England, put to death by the pageantry and pretence of Juſtice, contrary to all Law, Juſtice, and Piety, by a ſet of men, who unjuſtly ſeized the power, and endeavoured to ſanctify the moſt ſanguinary actions, and unparalleled villanies, with the ſtile of carrying on the *Cauſe of God and Religion.*

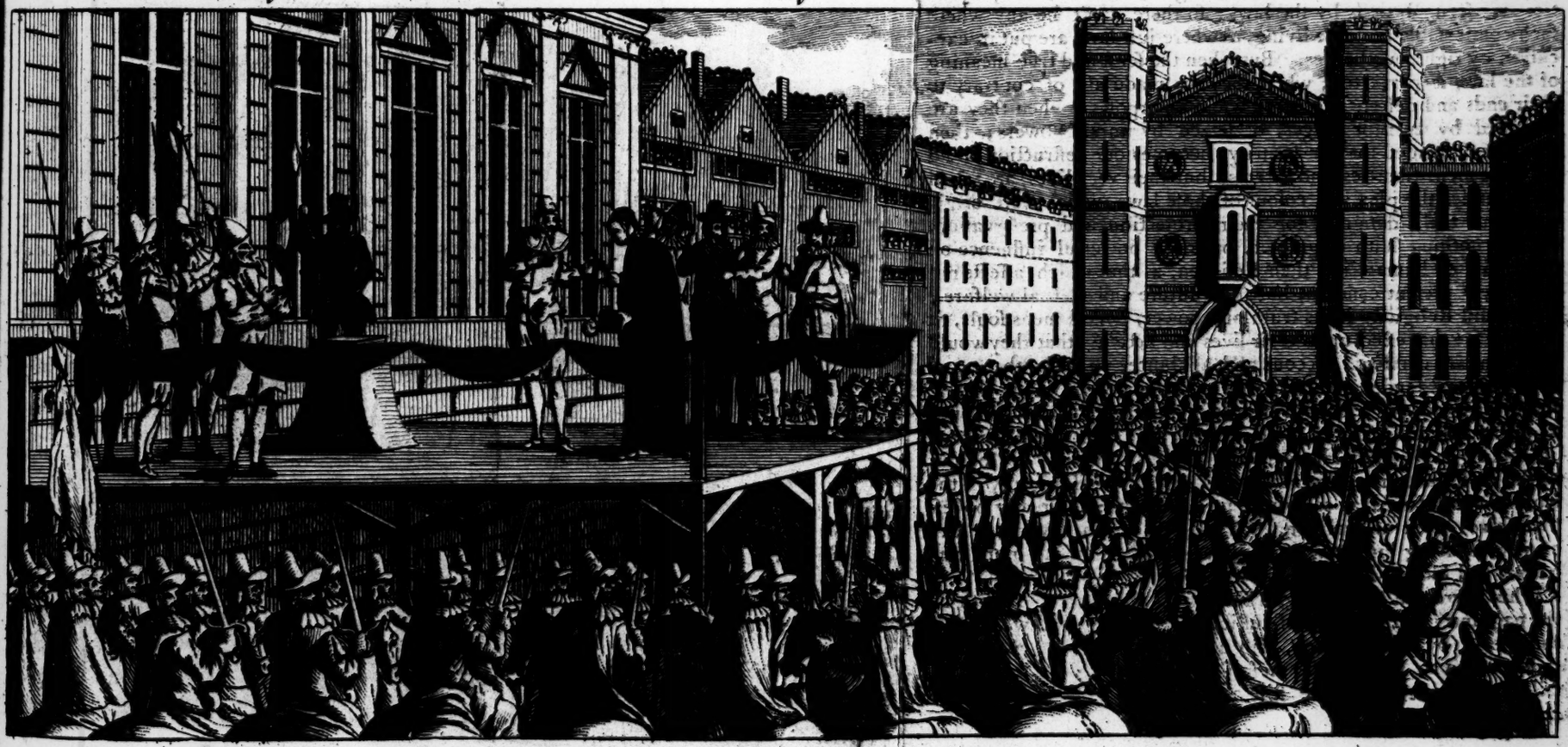
It

The WARRANT *to Collonel* FRANCIS HACKER *&c. for* BEHEADING *of K. CHARLES the First*

At the high Court of Justice for the Tryinge and Judginge off Charles Steuart King off England January XXIX*th Anno. Dom. 1648.*

Whereas Charles Steuart King of England is and Standeth convicted attaynted and condemned of High Treason and other high Crimes And Sentence upon Saturday last was pronounced against him by this Court to be put to death by the severinge of his head from his body Of which Sentence execution yet remayneth to be done These are therefore to will and require you to see the said Sentence executed In the open Streets before Whitehall upon the morrow being the thirtieth Day off this instante month off January between the hours off Tenn in the morninge and five in the afternoone off the same Day will full effect And for soe doing this shall be your Sufficient Warrant And these are to require All Officers and Souldiers and other the good People of this Nation of England to be assistynge unto you in this Service Given under our Hands and Seales. ——

A View of the Place and Manner of K. CHARLES the First's Execution.



It ſhall not be ſaid, That King Charle I. did not provoke his ſubjects, and alienate their affections from him, by arbitrary acts of power, ſupporting bad Miniſters and evil Counſellors, raiſing money without his Parliament, &c. But he, as King, had a right to that protection and ſafety of his perſon, which was provided for a King of England by the laws and conſtitution of his country.

Nothing but his blood could at laſt ſatisfy thoſe who had ſeized the power, under the name of the Commons of England: So that after this juſtice had been done upon the King's evil counſellors, which is all that is warrantable by law, becauſe a King can do no wrong, they reſolved to break off all treaty with his Majeſty about Peace, and the ſettlement of the Government, and to put him to death. But as this could not be done according to the ordinary courſe of juſtice, they were driven to the neceſſity of paſſing this reſolution in their Houſe of Commons, "That whatſoever is enacted or declared for law by the Commons in Parliament, hath the force of law, and the people concluded thereby; though conſent of King and Peers be not had thereunto:" And upon this Reſolution, they made a new Ordinance, For erecting an High Court of Juſtice, for trial of the King. The moſt probable way to judge of the qualifications of that Court, will be to look into the character of ſuch members thereof, as we can collect from the moſt genuine and impartial writers on this ſubject: And they are as follow:

Col. *Thomas Harriſon*, ſon of a Butcher, was brought up to the law, and took up arms for the Parliament, and was a fifth monarchy man.

Col. *Adrian Scrop*, of a good family, no Parliament man.

Mr. *John Carew*, of an ancient family.

Mr. *Thomas Scot*, of mean obſcure parents, bred in the Brewery.

Mr. *John Cook*, of mean birth, and bred to the law. He, by order of the Commons, drew up the Charge againſt his Majeſty, with the aſſiſtance of *Aſk* and *Doriſlaus*. He ſigned that charge in the name of the Commons of England; and became Solicitor for the Regicides: But being aſked by his Brethren in the Law, How he could be engaged in ſuch a Cauſe, he expreſſed himſelf in this manner: "I acknowledge it to be a very baſe buſineſs, but they put it upon me. I cannot avoid it.—I am ſerving the People—The King is as wiſe and gracious a Prince, as any in the world; but he muſt die, and Monarchy muſt die with him.—You will ſee ſtrange things—and you muſt wait upon God."

Mr. *John Jones*, of a mean family, and a menial ſervant, till he enlited in the army, and was promoted to a place in Parliament by Cromwell.

Mr. *Gregory Clement* was a broken merchant.

Such were ſome of the Judges that were commiſſioned to ſit upon the King's life, and who are particularly found amongſt the Regicides that ſigned the warrant for his Majeſty's execution, which warrant was directed to Col. *Francis Hatcken*, Col. *Huncks*, and Lieutenant Colonel *Phayre*, and every one of them, and was ſealed and ſubſcribed in the following order, by John Brandſhaw,

Eſq;

(as Lord-Preſident:) Tho. Grey, O. Cromwell, Edw. Whalley, John Skey, J. Danvers, Jo. Bourchier, H. Ireton, Tho. Mauleverer, Hat. Waller, John Blackiſton, J. Hutchinſon, Willi. Goff, Tho. Pride, Pe. Temple, T. Harriſon, J. Henſon, Hen. Smyth, Per. Pelham, Ri. Deane, Robert Tichborn, Humf. Edwards, Daniel Blagrave, Owen Rowe, Willm. Perſoy, Ad. Scrope, James Temple, Aug. Garland, Edm. Ludlowe, Henry Marten, Vinct. Potter, Wm. Conſtable, Rich. Ingoldeſby, Will. Cawley, Jo. Barkſtead, Iſaac Ewer, John Dixwell, Valentine Wauton, Symon Mayne, Tho. Horton, J. Jones, John Denne, Gilbt. Millington, G. Fleetwood, J. Alured, Robt. Lilburne, Will. Say, Anth. Stapeley, Greg. Norton, Tho. Challone, Tho. Wogan, John Venn, Gregory Clement, Jo. Donne, Tho. Wayte, Tho. Scot, Jo. Careu, Miles Corbet.

Therefore whatever was laid to the charge of the King, there could be no plea to juſtify, firſt, the manner of proceeding capitally againſt his Majeſty's perſon; nor the power of thoſe men, who ſigned the warrant for his Execution. He might be guilty of outrages and what not, and his Miniſters, who had adviſed him to thoſe illegal actions, had ſuffered for their crimes, as the Law directs. This was as far as the Law under our conſtitution could proceed: So that whatſoever exceeded this, and required of the King to ſatisfy that with his blood, which had been atoned for by the blood of his ſervants, who alone, were accountable for their bad government, was without Law, and unjuſt towards King Charles I. and ſubverſive of the Engliſh conſtitution.

Thus the inſtitution of this Faſt, and the perpetuity thereof, is not to be looked upon as a means to keep open a breach between the Members of the Eſtabliſhed Church and their diſſenting Brethren; or to worſhip K. Charles I. in the character or opinion of his Sainthip: But to ſhew a deteſtation of that power uſurped by the Commons to conſtitute, by their own ſole authority, a Court of Juſtice for the purpoſes above-mentioned; to bring freſh into memory the danger and miſery that follows to a Nation or People, when they depart from the Laws, that were made to protect and to ſave them from injury; and to inſpire them with reſolution never to ſuffer one part of the Conſtitution in the legiſlative capacity, to encroach and uſurp upon another, ſo as to deſtroy that balance of power, on which depends the exiſtence of the whole. An Inſtruction not confined to one ſet of people, but a Leſſon neceſſary for all to learn and to practiſe, that they may never be led away, either by the aggravation of a Crime, or by any miſrepreſentations, Zeal or Faction, to approve of or engage in any violent proceedings, that are not juſtifiable by law, and not warranted by the Conſtitution of their country.

At the ſame time, look upon a King meeting death upon a ſcaffold. His Majeſty was conducted, about ten o'clock in the morning, on the 30th of Jan. from St. James's Palace, through the Park, to Whitehall, on foot, attended by Dr. Juxton, Biſhop of London, and Col. Tomlinſon, through a military force, placed on each ſide to guard him: And at a little after twelve o'clock

Col.

Col. Hacker gave him notice to proceed to execution. His Majeſty readily followed him from the Cabinet Chamber, through the Banqueting-houſe, to the ſcaffold, by a paſſage made through a window.

The ſcaffold was well guarded by a numerous armed force, both horſe and foot, who kept off the ſpectators, and deprived them of their expectation to hear what the King ſhould ſpeak to them on ſuch an awful and extraordinary occaſion. However, the King directed his ſpeech, deſigned for the Public, to Col. Tomlinſon; and, amongſt other particulars, ſaid,

"—Indeed, I could hold my peace very well, if I did not think, that holding my peace, would make ſome men think that I did ſubmit to the guilt, as well as to the puniſhment: But I think it my duty to clear myſelf, both as an honeſt man, a good King, and a good Chriſtian. He appealed to all the world, that he did not begin the war with the Parliament; and called God to witneſs, That he never had any intention to encroach upon their privileges; and then laid the blame of thoſe violent proceedings againſt him, upon ill inſtruments between him and his parliament: Yet, continues he, tho' I find myſelf clear from blood-ſhed in this caſe, God forbid that I ſhould be ſo ill a Chriſtian, as not to ſay that God's judgments are juſt upon me. Many times he does juſtice by unjuſt ſentence. I will only ſay this, *That an unjuſt ſentence that I ſuffered to take effect, is puniſhed now by an unjuſt ſentence upon me.*

"As a good Chriſtian, ſaid he, I pray God forgive thoſe in particular, that have been the chief cauſers of my death; and I pray that they may take the right way to the peace of the kingdom. Now, Sir, you will never do right, nor God will never proſper you, until you give God his due, the King his due, (that is, *my predeceſſors*) and the people their due. I am as much for them as any of you. —But I muſt tell you, That their liberty and freedom conſiſts in having of government, thoſe laws by which their lives and their goods may be moſt their own. If I would have given way to an arbitrary way, for to have all laws changed according to the power of the ſword, I needed not to have come here: And therefore I tell you, and I pray God it be not laid to your charge, That I *am the* MARTYR *of the People.*"

After this, his Majeſty being reminded by the Biſhop, That it would be neceſſary for him to add ſomewhat to contradict that falſe report, which had ſo long and ſo artfully been propagated by his enemies, concerning his religious principles, who ſcrupled not to accuſe him of an intention to introduce Popery, and to overturn the Eſtabliſhed Church, and Proteſtant Religion, within his dominions; the King immediately, for the ſatisfaction of the Public in this particular, diſavowed all the imputations and reports that had been levelled and ſpread to his prejudice in that caſe; and expreſſed himſelf in the warmeſt manner, to have been always a friend and ſupport to the Proteſtant Religion; and that he had always lived, and was now ready to die in, and for, the Church of England.

To the PROPRIETORS *of the* GENERAL MAGAZINE.

GENTLEMEN,

INDUCED by your most excellent plan, to commence your Correspondent, as well as Reader, I have sent the following thoughts upon *Husbandry*; and if they meet with approbation, they shall be continued, with the sole view of furnishing those whom it may concern, with a regular digested system of Husbandry, and with the most approved maxims and practice in that branch of human knowledge; without which, manufactures could not be worked; nations would be depopulated; and the human race be reduced to the state of the brute creation, in their way of eating.

I am, Yours, &c. W. W.

PRACTICAL HUSBANDRY.

THE most early ages furnishes much speculation concerning the perfection to which the Asiaticks soon brought the practice of Husbandry, the most useful of all arts. To this knowledge we must ascribe the large supplies, which the husbandmen constantly sent to support large and populous cities, and more numerous armies. To this we must reduce the judicious conduct of the Egyptians, in the disposition of their country for Agriculture; which for many ages made Egypt the granary of the eastern nations: And to this knowledge we are to ascribe that sustenance so small a spot as *Judea* afforded to the prodigious number of its inhabitants.

An art of so great utility, and so necessary to mankind, as it spread into distant parts of the globe, and whose value encreased with time, engaged the attention of those in high station; and the more civilized the People, the more highly it was esteemed, and even taught by men of the first rank; amongst whom we find the Emperors Albinus and Valerius Asiaticus; the Kings Archelaus, of Cappadocia; Attalus, of Pergamus; Heron, of Seracuse; Cato, Consul of Rome; Mago, Suffetes of Carthage; and Xenophon, who was distinguished in Philosophy and in arms, writing volumes upon this essential art; not to mention Varro, Virgil's Georgics, upon which that poet chose to rest his future reputation, and the collection of the choicest remains of antiquity, by Columella.

But when arms became the only object, and the barbarous nations from the North broke in upon Rome and Greece, they, with the laws and liberties, also abolished Agriculture thus improved; and, instead of men of learning and dignity, we find their slaves intrusted with their trifling Husbandry. As those invaders, during the unsettled state of their conquests, had no real place of abode, they were content with a little cultivation for present use, near their temporary habitations. By this neglect of Husbandry the art suffered much, both in its practice and in its reputation; so that it was looked upon as mean and ignoble.

However,

However, when governments began to be founded upon more fixed and rational plans, Agriculture presently resumed its place, at the head of all other arts; and since that period, it has been observed, that those nations have always been most esteemed, and best able to support their strength and dignity, which made the greatest improvements in Husbandry: And it would be too tedious, and not necessary, to recite the many eminent authors and writers of great character, whose works, on this subject, were beneficial, and did honour to the age, and to their respective countries: Therefore, says Mr. Mills, in his late excellent treatise on this subject, "The general spirit of improvement in Agriculture, so remarkably exerted in the different nations of Europe, calls upon us not to lose that superiority, which the happiness of our constitution and climate have given us for that purpose." And this is more necessary to be inculcated in an age, when trade, commerce, and navigation, seem to divert us from this solid basis of a numerous propagation, and entice those, who are wanted to plow, to sow, to reap, and to do the other requisites in Husbandry, with hard labour, to seek a more spendid life with less toil, and more lucre; not considering, that when Agriculture is neglected, every other part of the body-politick must feel the bad effects thereof, and be buried in its ruin; of which we have a very near proof in the scarcity of corn both in Spain and Portugal, whose soil is excellent for all sorts of grain; but they are deprived of Husbandmen, by the extraordinary elopement of the natives, to seek an easier and more lucrative way of life in the mines of America.

It is not intended by the premises to affirm, that every man should be a farmer; but that it is the interest and duty of a government to take care that this essential art be not neglected; and that proper people be instructed or brought up in the practice of it; and that they be protected and encouraged.

For these great ends they should be first informed of the means by which plants are nourished; for this will help to guide him in the management of his Lands, and shew him in what state the earth should be, to enable the plants, which he cultivates, most easily and readily to find their necessary food.

This I call the basis of Agriculture: But whether any one intire principle does universally nourish all plants, or whether some particular salts and juices feed one plant, and others another, is the great question; upon the clear decision of which, the whole doctrine of vegetation depends.

Earth was the principle to which the ancients ascribed the production of the animals, vegetables, and other bodies, upon and about it: But many moderns, and those of great repute for their philosophical knowledge, have declared in favour of *water*; allowing the earth scarce any other use than to keep the plant upright, and to save it from over heat, and over cold. Because they alledge, water is, of its own constitution alone, a soil to vegetables, not only as the most genuine vehicle of the riches, which it imparts to plants, through the several strainers, and by means of which all change and melioration is effected; but because it is of all other

ſubſtances, beſt diſpoſed for ingreſſion, to inſinuate into, and to fertilize the earth; for proof whereof, it is obſerved, That floated grounds are remarkably fertile, after the flood has ſubſided.

Dr. Sharroh, however, allows the *air* ſome ſhare in this work, by its perpetual commerce and benign influences, charged as it comes with thoſe pregnant and ſubtle particles, which pervading and inſinuating into the earth's more ſteady, and leſs volatile ſalts, that inteſtine *fermentation* is begun and promoted, which gives life, growth, and motion, to all that ſhe produces.—Air is but a thinner water, to whoſe nouriſhment we may aſcribe the growth of pines, and other very large trees, among barren rocks, and thirſty pumices, where rains but ſeldom fall.

But tho' this opinion almoſt univerſally prevailed, on a conviction that there is hardly any fluid in all nature, except fire, whoſe conſtituent parts are ſo extremely ſubtle as water; Mr. Worlidge declares poſitively againſt the doctrine of plants being fed by water only; which nouriſhment, he ſays, is but weak at beſt, becauſe water does not contain a ſufficient quantity of the true nutritive particles. However, water muſt be allowed to be an abſolute neceſſary agent, by which the matter, proper for the nouriſhment of plants, is conveyed to them, and introduced and diſtributed into the ſeveral parts, both from the earth and the air, with the help of *heat*, whoſe aſſiſtance gives it the neceſſary action, exalts and digeſts the nutritive juices, dilates the pores of the plant, and raiſes the ſap into the ſtem, branches, and fruit, where the ſun perfects the work, by ripening it. Thus we find, as the heat decays, or the power of the ſun decreaſes, trees, &c. ſhed their leaves, and as the heat returns, they all recruit and flouriſh with verdure in proportion to the heat; which if it be too great, injures tender plants, by hurrying the ſap with too great rapidity, as a fever does the animal body.

Mr. Tull ſtands alone in the opinion, that *earth* is the food of plants; a doctrine contradicted by experience; for the neceſſity of inducing ſomething into poor ſoils, to enable them to produce crops, is univerſally acknowleged; whereas, if earth alone was the food of plants, it would, in all caſes, produce the ſame effect.

As to the grand queſtion, Whether plants of different kinds are nouriſhed by one univerſal food, or whether each particular ſpecies imbibes only its peculiar aliment? The ſupporters of this laſt opinion ſay, "It is not poſſible to conceive, that one uniform homogeneous matter ſhould conſtitute bodies ſo unlike in all reſpects, as the various tribes of vegetables; nay, even as the diff rent parts of the ſame plant: but the latter part of this confutes the former; for if the plant has the power of altering the original juices taken in by the roots, into ſo many various forms, as experience proves it has, each plant may be endued with the faculty of aſſimilating to itſelf the juices it meets with in the earth, as we find the ſame food not only nouriſh different animals, but produce in each its particular character. The willow and alder thrive beſt in a moiſt ſoil, the elm, pine, &c. in a dry earth: Yet theſe, and many more of the wideſt difference, are ſometimes ſeen

to

to draw their whole ſuſtenance, bulk, and ornaments, whether annual or perennial, from the juices they find in the ſame piece of ground, and from the ambient air and dews; though the ſtricteſt diligence cannot diſtinguiſh the particular aliments, taken in by t' ir ſeveral roots, the changing of the earth about the roots of theſe, or any other trees, whoſe bark, ſap, fruit, and ſeed, are of very different kinds and qualities, will only make each tree proſper the better.

But, ſay they, the ſame ſoil that has once been proper for the production of ſome ſorts of vegetables, does not always continue to be ſo; but in time loſes its property; *e. g.* if wheat be ſown upon land proper for that grain, the firſt crop will ſucceed very well, and perhaps the ſecond, or as long as the ground is in heart; but in a few years it will produce no more, if ſown with that particular corn; though it may produce another ſort of grain.

This argument carries an apparent weight; but, in the courſe of this particular ſyſtem, it ſhall be ſhewn, That this is owing to an improper culture of the land, more than to any defect in the ſoil itſelf; and as to the reaſon why ſome plants wont flouriſh together, is not that they feed on ſimilar juices, of which they rob each other, but becauſe certain effluvia or ſteams emitted by the one, ſhall be obnoxious or hurtful to the other.

Let plants delight in different kinds of food, ſome in water; ſome in a dry ſituation; yet ſo far as relates to the *Farmer*, they may be ſaid to be nouriſhed with one and the ſame ſubſtance: But it is neceſſary that both the earth and that ſubſtance be fitted for receiving and nouriſhing them: For be the earth ever ſo good, rich and proper for the production of vegetables, little will come of it, unleſs its parts have that juſt degree of ſtrength or coheſion, which ſhall give ſtability to the plant, and at the ſame time afford an eaſy admittance to the fibres of its roots, to ſpread and extend themſelves, in ſearch of that food: And, in order to give inſtructions how to obtain both theſe ends, we proceed to treat particularly of *Soils*; and the means whereby the Huſbandman ſhall meliorate them.

The Complete MODERN HOUSEWIFE.

HOUSEWIFERY is an accompliſhment, upon which the good women of this nation have always valued themſelves: And it has been their pride to excel in that laudable domeſtic conduct; on which their merit and intereſt ſo much depend, both as to their reputation amongſt their neighbours and acquaintance, and the management of a family. To this part of knowledge, therefore, it is reſolved to allot a ſmall ſhare of this Magazine, for the uſe and benefit of young women, whoſe minds are intent upon the good examples of their careful and induſtrious parents, and are deſirous to perfect themſelves in the neceſſary knowledge and practice of ſuch things, which every woman, at the head of a family, and entruſted with the care of a houſe, ought and muſt learn, before they preſume to take ſuch a charge upon them.

In

In theſe inſtructions we ſhall begin with that branch called *Cookery*, and endeavour to divide the matter in ſuch a manner as to furniſh the Reader with proper Receipts and Directions for the preſent ſeaſon.

Directions for ſpreading a Table.

IN the month of *February*, if you have *two Courſes* to provide for *dinner*, let your *bill of fare* be for the *firſt courſe*, "at the *top* of the table a ſoop remove; at the *bottom* ſalmon or ſtewed breaſt of veal; at the *four corners* a couple of fowls with oyſter ſauce, pudding, mutton cutlets, a fricaſcy of pigs ears. For the *ſecond courſe*; at the *top* patridges: at the *bottom* a couple of ducks; for the *four corners* ſtewed apples, preſerved quinces, cuſtards, almond cheeſe-cakes; in the *middle* jellies."

"For Supper: *one courſe*; at *top* of the table place a diſh of fiſh, remove a couple of roaſted fowls; at the *bottom* wild ducks; for the *four corners* collard pig, cheeſe-cakes, ſtewed apples and curds; in the *middle* hot minced pies."

How to Dress this Dinner and Supper.

RECEIPT for a *Soop*: Take four pounds of briſket of beef, cut into ſquare pieces, put it into ſix quarts of waters, add about half a pound of lean bacon, three large onions, a little ſalt and whole black pepper, and let the meat ſtew till it be tender, or till it has boiled down to four quarts; then add four large roots of cellery, a little ſtewed ſpinage, two turnips cut into dice, and a large carrot cut into ſlices; but ſkim off the fat in the boiling.

Salmon to be *boiled* in a ſufficient quantity of water, and to be put in cold; add to the water half a pint of vinegar, and a large horſe-raddiſh ſliced, to four pounds of fiſh; ſkim it well as it boils, and when it is done, ſerve it up with lobſter ſauce and plain butter melted: or, the following ſauce; take the gravy that drains from the ſalmon when taken up, add to it an anchovy or two, a little lemon peel ſhred, a ſpoonful of catchup and a little butter, to be thickened with flour, the thickneſs of cream; and as you ſend it to table put into the ſame a little ſhred parſley and fennel, if you would have it green.

Stew a *Breaſt of Veal* thus; cut off both ends, and boil them for gravy, raiſe up the ſkin part and ſtuff it with force-meat, made of the ſweat-bread, a few bread crumbs, a little beef-ſuet, two eggs, pepper and ſalt, and a little nutmeg to reliſh; ſkewer this under the ſkin cloſe down; drudge the veal with flour, tie it up in a cloth, and boil it about an hour in milk and water: Serve it up with a ſauce poured over it and made with a little gravy, about a dozen of oyſters, a few muſhrooms ſhred, a little lemon peal ſhred very fine, a little lemon juice and thickened with flour and butter: over all lay a ſweat-bread or two ſliced and fried, and garniſh the diſh with lemon, pickles and muſhrooms.

A *Quaking-pudding* is made with eight eggs very well beat, and put into three ſpoonfuls of good flour, with a little ſalt; then boil three gills of cream or new milk with a ſmall ſtick of cinnamon and a blade of mace, when this is cold, mix in your eggs and flour, butter the cloth in which it is to be tied, and don't give it too much room in the cloth; half an hour will boil it, obſerving to turn it in the boiling, otherwiſe the flour will ſettle; the ſauce to this pudding is plain ſweet butter, and a caſtor of double refined ſugar powdered.

Mutton Cutlets are made by cutting a Neck of Mutton in joints, and cutting off the ends of the long bones; then ſcrape the meat clean off the bones about an inch, take a little of the inpart of the meat of the cutlets and make it into force meat, ſeaſon it with nutmeg, pepper and ſalt, a few ſweet herbs ſhred very fine, and bread crumbs: ſtrew this ſeaſoning properly over the cutlets: wrap them in double writing paper, and then broil them either before the fire or in an oven for half an hour; then take off the paper and ſerve them up with a little brown gravy in a baſon. You may broil them without paper.

A *Fricaſcy* of *Pigs Ears*: Take as many Pigs Ears as ſhall ſuit your occaſion; clean and boil them very tender, cut them in ſmall long pieces, and fry them brown in butter: then put them into a ſtew-pan with a little brown gravy, a lump of butter, a ſpoonful of vinegar, and a little muſtard and ſalt thickened with flour; take alſo two or three pigs feet and boil them very tender, fit for eating, take out their large bones, dip them in egg, ſtrew them with a few bread crumbs, fry or broil them, and lay them in the middle of the diſh with the pigs ears.

Apples are ſtewed thus; boil a pound of double refined ſugar in a pint of water; ſkim it well and then put into it a pound of the beſt pippens, pared, cut in halves if large; but if ſmall put them in whole: core the large pieces, and boil them with a continual froth till very tender and clean; then take out the apples and put into the ſyrup the juice of two lemons, a little peel as ſmall as threads; boil theſe up in the ſyrup, and when thick enough, pour it upon the apples: when ſerved up, they may be ſtuck with bits of candid orange, or with almonds cut into long bits.

Cuſtards are made by boiling two quarts of milk new from the cow, with a ſtick of cinnamon; into this put eight eggs beat very well, with whites and all, except two, and a little roſe-water; then put in half a pound of powder ſugar and a little of your milk amongſt the eggs; mix all together, ſet them over a ſlow fire, ſtirring all the time, till it becomes as thick as cream; don't let it boil; and when you take it off, add a little brandy with judgment, and put your cuſtards into cups for uſe.

Tho' we have given a particular bill of fare above, it does not include that the contents are the only things that the ſeaſon affords, for they that chuſe to go to greater expences may treat their gueſts with *cods head*, *ſalmon* and *turbot* broiled, and *ſmelts* fried to garniſh the diſh; with *tench* and *carp* ſtewed; *pike* roaſted with a

pudding

pudding in its belly; *whitings*, *plaiſe*, *flounders* broiled or fried; *eels* pitchcocked or broiled or boiled; *lobſters*, *ſturgeon*, &c. *Salt-fiſh* and eggs or parſnips, or potatoes, with *hen turkey* and oyſter ſauce if boiled, and with egg or gravy ſauce if roaſted; *hen* and *chickens* with greens in ſeaſon, and *aſparagus*; *quails* and *ſquab pigeons*, and young *rabbets* roaſted or fricaſcyed; *chine of mutton* and caper ſauce; *leg of veal* boiled and *neats tongue* with broccoli.

The GARDENER's General KALENDAR.

THERE is no part of a Gentleman's retirement ſo agreeable as the time ſpent in his garden. Beauty and Art, with entertainment and profit ſeem to vie with each other in this plot.

But we can neither expect pleaſure or profit from a garden that is neglected or unſkilfully managed: Therefore I ſhall lay down the work that is to be done this month in the garden; and the manner how that work is to be performed;

In *February*, complete the hot beds with earth ſix inches thick, on which ſow cucumbers and melons every week to guard againſt accidents; ſow raddiſhes and ſpring carrots together on a large hot bed, covered with eight inches of earth, and above with mats; make another hot bed for annual ſeeds, and muſhroom beds, which may be repeated every month; ſow Batterſea french-beans in a hot bed, they'll produce in April; ſow purſlane on a hot bed, and colley-flower ſeeds about the end of the month, upon a declining hot bed: and about the ſame time ſow peas, beans, parſley, ſpinage, carrots, parſnips, turnips, onions, leeks, Dutch brown lettice, white Coſs and Sileſia, raddiſhes and aſparagus in the natural ground.

This is the month to ſow potatoes and Jeruſalem artichokes in heavy ground: plant garlick, ſhallots and rocumbole in light ground; and tranſplant your crop of cabbage plants.

Make plantations of ſtrawberries, raſberries, gooſeberries and currants, and ſet wallnuts, acorns, cheſnuts, *&c.*

Plant vines and figs, prune fruit trees and nail them, obſerving always to lay the branches horizontally as much as poſſible, and to keep the middle of the tree from wood and perpendicular ſhoots.

Give the vine the laſt winters prunning; and preſerve its ſhoots, and about the end of this month is the time to graft cherries, plumbs, pears, and apples.

Plant all ſorts of fruit trees, and rub off moſs from trees, and ſcrape and clean them from cankers, *&c.*

Cut and lay quickſets, earth up the roots of trees, and drain ſuperfluous moiſture from them.

In the *Flower Garden* and *Parterre*. Early in this month ſow auricula ſeeds, and the ſeeds of the polyanthus in a ſhady border, as hereafter directed in pag. 26. mix anemony ſeed with very dry ſand, and ſow it in very light earth: plant the anemony, ranunculus and tulip for blowing, if not done before.

Tranſplant

Tranſplant roſes, jeſſemins, honeyſuckles, the laburnum, lilac, ſyringa, ſypreas, altheas, and all flowering ſhrubs; and make layers of roſes, honeyſuckles, phillarea, laurus tinus and other ſhrubs: about the middle of the month, give freſh earth to the carnations planted out in autumn: and towards the end, ſow larkſpurs, holly-oaks, Canterbury bells, ſweet-williams, annual ſtocks, candy tufts, pinks, &c. and make plantations of the lily of the valley on ſome ſhady bank.

Sow orange and lemon kernels in pots, and ſet the pots in hot beds; the kernels are to be ſet as ſoon as taken out of the fruit: ſhift ſuch myrtles as require large pots; at the ſame time ſhave off the outſide fibres of their roots, and if needful prune their heads cloſe.

Bring out the houſed carnations in warm weather and mild ſhowers of rain; but don't ſuffer them to ſtand out all night.

The hot bed for raddiſhes and carrots is to be made in the common manner, with new horſe-dung and wet litter, trod down very hard at three ſeveral times, about three foot deep, and covered with fine ſifted mould, or the earth of an old rotten bed, about ſix inches thick; cover it with mats or ſtraw for about a week, or till it comes to a moderate heat: but for muſhrooms make the hot bed thus; dig a trench about ſix inches and lay in it horſe-dung ridgewiſe, till it riſes to three or four feet high; obſerving to make the laſt covering of dung; cover this with dry muſhroom earth, and then lay on freſh earth, two or three inches thick, taken from under a turf, rather ſandy than otherwiſe; then lay ſome dry muſhroom earth, and cover the bed with ſtraw or dry litter, to preſerve it from ſevere weather; water it twice or thrice a week on the covering of ſtraw: the muſhrooms will appear in two months time, and muſt be cut as they come up: but if the earth be not too thick they will come up in a month, and ſooner in a cucumber hot bed.

All the ſorts of cabbages are to be planted at proper diſtances, as their ſize requires; and almoſt in any ground, provided it be well watered in dry weather before planting.

Carrots delight in a light ground, mixed with ſand: thoſe that are ſown in this month are for the winter crop.

The Dutch turnips is the beſt ſort to ſow in the ſpring; they love a ſandy loamy ſoil; but will grow in any ground; and grow ſo rank as to make it neceſſary to hough them, when they have two or three leaves.

Onions are ſown in rich garden ſoil: when they come up in April they muſt be houghed, ſo as to leave about three inches between the plants, till they begin to grow fit for ſallads, and then they may be thinned by drawing.

Strawberries delight in ground that inclines to clay, trenched up with horſe-dung and coal-aſhes mixed together.

Plant Raſberries in a ground that inclines to clay: propagate them by ſlips taken from the roots, about the latter end of this month, and plant them in ſingle rows about twelve or eighteen inches aſunder, and three feet at leaſt between each row, leaving

the heads two feet high when planted. This, and the Strawberry, do not come to their full crop till the third ſummer after planting.

The gooſberry is propagated by ſeeds, ſuckers, or cuttings. Sow the ſeed as ſoon as ripe; it will come up the ſpring following. The ſuckers are taken from the roots of old buſhes, after the leaves are fallen, in open weather, and tranſplanted; and cuttings in Sept. and October will take root. October is the beſt ſeaſon to tranſplant this buſh, and it requires a ſtrong holding ſoil.

Currants like the ſame ſoil, and are raiſed in the ſame manner. And to have a large fruit on them both, care ſhould be taken to leave no ſhoots above three years growth.

This is the chief month for pruning. In pruning, obſerve that a vigorous tree cannot have too many branches, if they be well diſpoſed; nor a weak tree have too few; and ought to be pruned early, that the ſap may not waſte itſelf too much. All branches which ſhoot directly forward, are to be cut off cloſe to the branch from whence they ſpring. The tree muſt not be crouded with wood; and convenient ſpace is to be left between the branches; which are always to lie horizontally, as much as may be. Cut many ſmall weak branches, that ſhoot from the like, and all ſhoots made in the Autumn: And if a tree ſhoot ſtrong at bottom, and has a ſickly top, cut the top off: On the contrary, where the top is ſtrong, and the lower branches weak, cut off the ſickly bottom branches: And if the old tree be in a very weak condition, leave very few branches, and ſhorten them to five or ſix inches. The beſt time to prune a plumb tree, is when they are ready to bloſſom; And they require a ſecond and third pruning, about the middle of May, or in June or July. The apricot and nectarine are pruned in the ſame manner.

In the *Flower-garden* and *Parterre* we are to ſow the Auricula in a box of earth, with holes at the bottom, and covered with two inches of coal aſhes, and filled up with earth taken out of hollow willow trees. Spread the ſeed upon this ſurface, and preſs them down with a board; but don't ſprinkle them with earth. Place the box in the ſun to the beginning of April, and refreſh this ſeed-box continually with water; then place it in the ſhade. The Polyanthus ſeed is ſown in the ſame kind of earth, ſhaded and watered. The Double Sweet-william is propagated from ſlips taken near the root, and planted in a loomy ſoil; and they may be laid down in the earth like Carnations.

To the PROPRIETORS *of the* GENERAL MAGAZINE.

YOUR improved ſcheme gives much ſatisfaction in theſe parts: We are now perſuaded, that our monthly contribution, for a periodical entertainment, will be well applied; and that *Art* and *Nature* will each have that due regard paid to them, as far as can be expected in a work diſtributed into ſo many branches. With this perſuaſion, I am become a new correſpondent; and propoſe to entertain your Readers with a few *Philoſophical Anecdotes*.

Z.

PHILOSOPHY.

PHILOSOPHY.

IT is vanity for men to attempt to diſcourſe of, much more if they dare enter the liſts of diſpute about Natural Things, before they are acquainted with the Nature, Cauſes, Properties, and Effects of Created Beings; ſo far as they are capable of being known by Reaſon, and diſcovered by Art; which we call *Philoſophy*.

Thus, if we are to diſcourſe of Man, of Fire, or of Ice, we muſt be acquainted with their reſpective nature, or their peculiar ſtate or condition, by which each of theſe are diſtinguiſhed from each other, and from all other Beings whatſoever; as it is the nature of man to be ſociable, of fire to be hot, and of ice to be cold.

In regard to the *Cauſes*, we are to underſtand the means by which things are brought into exiſtence. If we look for a *firſt* cauſe, nature directs us to that God from whom are all things, and who, by way of pre-eminence, is ſtiled the firſt and primary cauſe of all things. However, this is not ſo properly the ſubject of Natural Philoſophy, as the enquiry into *ſecond cauſes*, which produce theſe effects, according to the direction and influence of ſome eſtabliſhed and original laws and rules, implanted in their natures at their creation. Thus the ſun cauſeth vapours, vapours cauſe clouds, and clouds, when condenſed, cauſe rain. In which progreſſion they all act in a ſecondary manner, under the original influence of the firſt cauſe: Therefore the doctrine of *ſecondary and final cauſes* is of the laſt importance in true Philſophy; becauſe the former are the means *by which*, and the latter the end *for which*, all things receive their Being, from the primary efficient cauſe, which is the Almighty Creator.

The *properties* of things are thoſe qualities and operations peculiar to themſelves, and which diſtinguiſh them from all other kinds of Beings: thus it is the property of man to laugh and to reaſon; of air and wind to be inviſible; of ſpace to be infinite.

By effects underſtand whatever is produced or brought to paſs, by the action or operation of any natural cauſe. Thus vapours are the effect of the ſun's attraction, ice is the effect of froſty air, viſibility the effect of light.

Beſides, Philoſophy is divided generally into *moral* and *natural*. By *Moral Philoſophy*, we are to underſtand what is plainly called *Morality:* whoſe buſineſs is to lay down rules and laws for behaviour, manners, and the conduct of mere man, as a rational creature: Therefore its grand deſign and end, is to make mankind acquainted with the means and methods of being happy, and to promote virtue, to obtain ſocial comfort, or the greateſt felicity in this life.

Under *Natural Philoſophy*, are comprehended the two appellations of *Phyſicks* and *Phyſiology*. *Phyſicks*, which ſignifies Nature, in the Greek, imports the ſcience or knowledge of nature, or natural bodies. *Phyſiology* implies a treatiſe or diſcourſe on nature,

and natural bodies; to which I ſhall particularly confine my correſpondence.

However, before we proceed to *Phyſiology*, let it be remarked, That Philoſophy in general implies the love of wiſdom, or the ſtudy of knowledge or learning in general.—That the proper ſubject of Natural Philoſophy is ſubſtance or matter, under all the various forms and figures we can behold or conceive, which we call natural bodies, with all their properties and affections.—That the deſign of Natural Philoſophy is to improve human knowledge, to make us better acquainted with nature, to give us a rational ſenſe of things, by diſcovering the reaſon of the various and different affections, qualities, and effects, of objects which offer themſelves to our ſenſes, as far as poſſible, by the light of nature.—And that its principal uſes are almoſt innumerable; for hereby men are diſtinguiſhed from brutes: Phyſicians acquire the knowledge of the virtue and effects of plants and herbs; the Chymiſt finds the method of analyzing and diſſolving metals, minerals, plants, animal ſubſtances, &c. and reducing them to their firſt elements; and the Aſtronomer learns the frame and conſtitution of the heavens, and the magnitude, diſtance, and phaſes, of all the heavenly bodies; the Huſbandmen are inſtructed by this ſcience in the moſt advantageous methods of cultivating and manuring land, *&c.* the Seaman borrows the theory of his art; and there is no ſtate, art, or capacity in life, but either, directly or indirectly, receives advantage and benefit from Natural Philoſophy; as ſhall more fully be made appear, in the ſequel of my correſpondence.

Of MADNESS *in* DOGS, *and its* CURE.

To the PROPRIETORS *of the* GENERAL MAGAZINE.

PRAY, Gentlemen, pay ſome attention to the welfare and intereſt of your readers, who delight in Hunting and Dogs; my own caſe is not ſo bad; but ſeveral of my neighbours have been plagued with madneſs amongſt their hounds; ſo that they were obliged to kill many; and had I not interpoſed with the following methods of cure, it might have quite cleared our country of Sportſmen, for they would not have had a dog left.

I have remarked ſeven kinds of madneſs in dogs; two of them are incurable: Their biting is dangerous, and their diſeaſe infectious.

The firſt, incurable, is the *hot burning madneſs*, and may be diſcovered and known by the dogs bolting his tail upright, as he runs: He runs upon any thing that ſtands before him; and has no foam in or about his mouth, which is very black. This diſeaſe kills the dog in three or four days. All the dogs or men bit by ſuch a one, will be mad in the ſame manner.

The ſecond, incurable, is the *running madneſs*. A dog, thus diſtempered, runs at dogs only. It is known by his ſmelling, and then biting and ſhaking dogs, in ſuch a manner, as if he meant no miſchief.

Both

Both theſe kinds ought to be ſhot or killed upon the firſt appearances of their madneſs; and take care that neither dogs, cats, nor even ſwine or poultry come near and lick, or pick up any thing tainted by the blood, ſlabber, excrement, or the breath of ſuch a mad dog; for they will certainly be infected if they do.

The Curable Madneſſes, or rather Diſeaſes of Dogs are

Firſt, the *Dumb Madneſs*; in which the Dog will not feed; keeps his mouth continually open, and puts his feet to his mouth frequently, as if he had a bone in his throat: this is cured by giving him in a ſpoon eight drams of the juice of the herb heartſhorn or dogſtooth.

Second, the *Falling Madneſs*. It lies in the head, and makes the Dog reel and fall, as he goes: this is cured by a draught made with four ounces of juice of piony, as much of the juice of briony; the ſame quantity of the juice of cruciata, and four drams of ſtaveſacre pulverized, which, mixed together, muſt be given in a horn or with a funnel; then bleed him in the ears, or the two veins that come down the ſhoulders. You may repeat it if neceſſary, till quite recovered.

Third, is the *lank madneſs*, ſo called by reaſon of the leanneſs of the body, occaſioned by *ſkummering*. It is cured by a purge made of *caſſia fiſtularis*, one ounce and a half: of powder of ſtaveſacre, two drams and a half: of ſcammony prepared in white wine vinegar, two drams and a half: oil of olives four ounces: mix and warm them temperate over the fire, and give the doſe with a funnel or horn; next day bathe him in a large tub of hot water ſufficient to cover him, and prepared with ten handfuls of mugwort, roſemary, ſage, roots or leaves of marſhmallows, roots or leaves of wallwort, roots or ſtalks of fennel, leaves or ſtalks of elecampane, balm, rue, ſorrel, bugloſs and mallilot; repeat this four times.

Fourth is the *Sleeping-madneſs*; occaſioned by worms in the mouth of the ſtomach, that makes the dog ſleep continually, and frequently till he dies ſleeping. It is cured by taking juice of wormwood five ounces, powder of burnt hartſhorn two ounces, agarick two drams: mix them in a ſufficient quantity of white wine, and give it the dog to drink.

Fifth is the *Rheumatick* or *Slavering-madneſs*; ſo called becauſe it makes the dog's head ſwell, his eyes very yellow, and his mouth ſlaver very much. This is cured by a draught made of the juice of fennel and miſsletoe *āā* ſix ounces, juice of ivy, powder of polypody root *āā* four ounces, boiled in white wine.

N. B. In all theſe diſtempers the dog falls from his meat; and if not cured in eight or nine days will ſtarve to death.

To theſe I ſhall add a Remedy much wanted againſt the *Mange*. The common Mange is frequently got by want of freſh water to drink; by foul kennelling, and by foundering and melting the dog's greaſe. The cure is to take of wild creſſes, elecampane leaves and roots of roerb and ſorrel *āā* two handfuls, and of the

roots

roots of trodels two pounds; boil them all in lye and vinegar; ſtrain the decoction; then add two pounds of Caſtile ſoap; when the ſoap is melted therein, it will be fit for uſe; and the dog muſt be rubbed every day with it well, for four or five days, and he will be cured.

NATURAL HISTORY.

NATURAL Hiſtory, wherein every ſtep is marked with certainty; and not only curioſity is ſatisfied, but we are taught to ſupply our wants from the object deſcribed, takes place of all other Sciences for uſe and amuſement. But the multitude of Nature's productions is ſo very numerous, that they have ſeemed rather to bewilder than excite the attention of the curious enquirer. "The various wonders of the *animal*, *vegetable*, and *mineral*, would ſeem, as an ingenious writer on this ſubject expreſſes himſelf, to exceed all powers of computation, and the ſcience appears barren from its amazing fertility." But a nearer acquaintance with this ſtudy, if method be obſerved, points out a ſimilitude in many objects, which at firſt appear different, the mind by degrees riſes to conſider the things before it in general lights, till at length it finds Nature in almoſt every inſtance acting with her uſual ſimplicity.

This is the intention of the ſyſtem now communicated to the Public thro' your Magazine; and I hope it will be inſtructive, and as pleaſing as the nature of the ſubject will bear.

I ſhall begin with the hiſtory of *Quadrupedes*, or *four-footed* Animals, which next to Man demands the foremoſt place; they being the moſt intereſting part of animated Nature.

Man while yet a ſavage, naked, unarmed and without ſhelter, had a formidable rival in every wild beaſt, and an object to employ the heroes in the deſtruction of the Brute creation. But as the human Race multiplied and were civilized, they ſoon cleared the plains of its brute inhabitants, aſſerted their dominion over all orders of animated Nature; they reſerved a part for their own uſe and pleaſure, and they left the reſt to ſeek refuge in barren deſerts and lonely wilderneſſes.

Here we have the moſt proper diviſion of Quadrupedes, *viz.* ſuch as Man has taken under his protection and ſubdued or tamed, which are *domeſtic* animals; and ſuch as ſtill preſerve their independence and natural ferocity, and are therefore called *ſavage* animals.

The Savage Animal preſerves both his liberty and inſtinct; but Man ſeems to have changed the very nature of domeſtic Animals by cultivation and care. A domeſtic Animal is a ſlave, which has few other deſires but thoſe which Man is willing to grant it; humble, patient, reſigned, attentive, it fills up the duties aſſigned, ready for labour, and content with ſubſiſtence; and not its liberty but its very figure is changed by the art and induſtry of men; as appears in the immenſe variety in the ordinary race of Dogs and Horſes; what a difference between an Engliſh Maſtiff and

and a ſmall Spaniſh Lap-dog? yet the whole has been effected by the nature of the climate and food, ſeconded by the induſtry of man, in continuing the ſpecies without mixture.

As in external figure theſe creatures bear evident marks of human cultivation; ſo is there alſo ſome difference in the natural ſtructure of their bodies. For the ſtomach of the domeſtic Animal is not uſually ſo large; a circumſtance owing to its manner of feeding at certain and expected intervals, and by a little at a time, which contracts the ſtomach to its contents, and fits the Animal for the life it is obliged to lead.

Yet tho' Nature in a great meaſure ſuffers reſtraint in the domeſtic Animals; every ſpecies of the ſavage tenants of the foreſt, deſert or wilderneſs preſerves its characteriſtic form, and is ſtrongly impreſt with the inſtincts and appetites of Nature. The more remote from Mankind the greater ſeems their ſagacity: For inſtance; the *Beaver*, in thoſe diſtant ſolitudes, rarely frequented by the human ſpecies, exert all the arts of architects and citizens; they build neater habitations than even the national inhabitants of thoſe countries can ſhew; and obey a more regular diſcipline than ever Men could boaſt: But as ſoon as man intrudes upon their ſociety, their ſpirit of induſtry and wiſdom ceaſes; they no longer exert their ſocial arts, but become patient and dull, as if to fit them for a ſtate of ſervitude. The Lion that is bred in the leſs frequented deſerts of Nubia, is remarkable for its ſervocity and courage; for inſtead of avoiding Men, as other Animals will do, he dares to attack whole caravans; and if over powered, retires with his face towards the enemy. But the Lion of Morocco, which is a more populous country, ſeems to acknowledge the ſuperiority of the human Species, and is ſcared away by the cries of women and children.

The foreſt, remote from Man, is the place where we are to look for thoſe varieties, inſtincts, and amazing inſtances of courage and cunning, which four-footed Animals exert in a very high degree. And their various methods of procuring ſubſiſtence, may well attract our admiration: neither is their peculiar conformation for the life in which they find greateſt pleaſure, leſs ſurprizing. The rapacious Animal is in every reſpect formed for Man; yet the various kinds make their excurſions in very different ways. The Lion and the Tyger purſue their prey by fight alone; and for this purpoſe, they are furniſhed with a moſt piercing eye. Others hunt by ſcent; while others lie in ambuſh, and wait an opportunity to ſeize any thing they can over-power.

The Carnivorous Animals have teeth capable to hold and to tear their prey; they ſerve them as offenſive weapons. Thoſe that feed upon vegetables, have teeth rather to ſerve as grindſtones, to gather and comminute ſimple food.

The Legs of all Quadrupedes are admirably ſuited to the motion and exerciſes of each Animal. In ſome they are like ſtrong pillars made for ſtrength only, and to ſupport a vaſt unwieldly body. In others who are remarkable for their ſwiftneſs, their feet are ſlender, but nervous; many have only ſhort nails for their more ready and

ſafe

fafe running, walking, and climbing, others have ſharp and long talons, as the Lion, and moſt ravenous beaſts, to deſtroy their prey.

The heads of ſome Quadrupedes are ſquare and large, ſuiteable to their low weapon, food, and abode; of others, ſlender and ſharp, as in a hog, the better to fit them for turning up the earth. Some have long necks, and no ſtronger than juſt to ſerve to carry their mouth to the ground, in order to feed. Some have ſhort, brawny, and ſtrong necks, as Moles and Hogs, who turn up the earth; but, in general, the Quadrupedes that feed on graſs, are enabled to hold down their heads, by a ſtrong tendonous ligament, that runs from the head to the middle of their back; by which means the head, though heavy, may be held down a long time, without any labour, pain, or uneaſineſs, to the muſcles of the neck.

The ſtomach is generally proportioned to the quality of the animal's food. Thoſe which live upon fleſh, and ſuch nourifhing ſubſtances, have it ſmall and glandular, affording ſuch juices, as are beſt adapted to digeſt and macerate its contents; whereas moſt ruminating animals, which chew the cud, and entirely feed upon vegetables, have four ſtomachs, all which ſerve as ſo many laboratories, to prepare and turn their ſimple food into proper nutriment.

I ſhall conclude this Letter or Eſſay towards a complete ſyſtem of Natural Hiſtory, with obſerving, That whatever food the Quadrupede feeds upon, nature ſeems nicely to have fitted the creature for procuring it; tho' never without a proper exertion of its ſtrength, induſtry, or cunning.

An ANECDOTE *concerning* King CHARLES II's AMOURS.

ONE part of the true character of K. Char. II. in regard to his moral principles, is, That he was violently addicted to women, and only valued them for the ſenſual pleaſures they could yield. This appetite, or rather paſſion, appeared more openly in his public commerce with the miſtreſſes he admitted to Court; and privately in the nocturnal debauches his Majeſty entered into in company, with ſome of his Courtiers, in the extravagant purſuits of illicit and carnal pleaſures, amongſt the common proſtitutes of the town: Which at laſt became ſo diſagreeable to his conſtant miſtreſſes, that they, or one of them engaged Lord Rocheſter to undertake the following ſtratagem, to cure that monarch of thoſe nocturnal rambles.

Rocheſter, who was frequently the King's conductor and companion, on ſuch occaſions, propoſed to go out one night with him to viſit a celebrated houſe of intrigue, where his Lordſhip perſuaded the King the fineſt women in the nation were to be had. The King agreed, and put on his uſual diſguiſe. Rocheſter conducted him ſafe to the ſaid houſe; and, without diſcovering the quality of the gueſt, inſtructed the girl, pitched upon by the King for his pleaſure, to pick his pocket of all his money and his watch; left them to their enjoyments, and ſlunk away out of the houſe, without being

ing diſcovered. The girl performed her work ſo well, that the King never miſs'd his watch and money: But when the intrigue was ended; and, upon enquiring after Rocheſter, found he was gone, and finding both his caſh and watch were gone alſo; the King was ſadly embarraſſed for money to diſcharge the reckoning. There was no way for him to conduct himſelf in ſuch circumſtances, than to tell the bawd who kept the houſe, that the Gentleman who came in with him, and was gone, was to have paid for him; and as he was not returned, deſired ſhe would give him credit for the reckoning, till to-morrow: But ſhe abuſed him groſly, and laughed him to ſcorn; adding, That ſhe had often been ſerved ſuch dirty tricks, and ordered one of the bullies to detain him till the reckoning was paid.—In this ridiculous diſtreſs ſtood the Britiſh Monarch, the priſoner of a bawd; and the life, upon whom the nation's hopes were fixed, put into the power of a ruffian.

After many altercations, the King propoſed to leave his diamond ring; but ſhe rejected the pledge; alledging, that ſhe was not a judge of its value, and for ought ſhe could ſee, it might be a piece of glaſs ſet in pewter: However, after many importunities and proteſtations of the value of the ring, and fair promiſes of a premium for his releaſe; the old bawd ordered her bully to carry it to a neighbouring Jeweller, and if in bed to call him up. The Jeweller, as ſoon as he had examined the ring, ſtood amazed; and enquiring, with his eyes fixed on the fellow, whom he had got in his houſe, that could be maſter of ſo valuable a ring; and being told, It was a black-looking ugly ſon of a wh—re, who had no money in his pocket, and was obliged to pawn his ring; the Jeweller replied, This ring is ſo immenſely rich, that no man in this nation can afford to wear it, except the King: And being aſtoniſhed at this accident, the Jeweller went with the bully, in order to be fully ſatisfied of ſo extraordinary an affair: And as ſoon as he entered the room, he fell on his knees, and, with the utmoſt reſpect, preſented the ring to his Majeſty. This brought the old bawd, and the bully, upon their knees, and to beg pardon moſt ſubmiſſively. The King, in the beſt-natured manner, forgave them; and, laughing, aſk'd them, whether the ring would not bear another bottle.

Thus ended this adventure; in which the King learned how dangerous it was to riſk his perſon in night frolicks: He ſeverely reproved Rocheſter; but he ſincerely reſolved never more to be guilty of the like indiſcretion.

The DYING WORDS *of* GUSTAVUS ADOLPHUS, *King of* SWEDEN, *the greateſt* WARRIOR *of his Age.*

GUSTAVUS ADOLPHUS, King of *Sweden*, who had weathered the moſt ſevere fatigues of a military life, and eſcaped the hazards of many ſieges and battles, was at laſt confined to his chamber at Gottenburgh, by a fever, which, tho' ſlight at firſt, increaſed to ſuch a degree, by the perpetual agitation of his mind,

for the loſs of Fuenen, that it ſoon brought him to deſpair of his recovery.

In this ſtate his Majeſty commanded his Great Counſellors of State, the Nobles of Sweden, and Ambaſſadors from foreign nations, to be called before him: To whom, being raiſed up a little in his bed, he expreſſed himſelf after this manner:

"*My Lords, faithful Counſellors, and dear Allies,*

"DURING the ſhort time I have poſſeſſed the Crown of Sweden, it has been my endeavour to defend and to enlarge my dominions, according to the example of my famous predeceſſors. My ſucceſs in Bremen and Poland is known to all the world. I had both the King and Kingdom of Denmark in my power; but, content with the glory of the conqueſt, I reſtored him to his dominions, and gave him peace. He requited my generoſity, by an immediate league with the Emperor and Holland, againſt my perſon, crown, and dignity: To which confederacy, and the miſconduct of my brother in Pomerania, I charge the loſs at Fuenen, and the grief I feel for the impriſonment of my eminent commanders at Gluckſtadt.

"I deſire that my moſt dear lady, the Queen, may be Regent after me, during the minority of my ſon, to whom I do beſeech God to be a father. I leave unto you the management of all affairs, both Eccleſiaſtical and Civil; with my commands that you be zealous towards God, dutiful to your Queen, and faithful to your Country.

"If Denmark offers terms of peace, I would adviſe you to improve that overture. But, as that nation has ſhewn there is no dependance on treaties with them, take care that it be ſuch a peace, as ſhall in no wiſe diſhonour you, and that it be advantageous to your nation; and not without you can have Elſeneur and Cronenburg, as cautionary towns for performance of the ſtipulations therein to be contained."

His Majeſty then attempted to give ſome directions about the payment of Queen Chriſtina's dowry; but his ſpirits failed him; and he, with much difficulty, was brought again to his ſenſes; when he thus reſumed his diſcourſe:

"I have hitherto ſpoken to you in the character of a King; I ſhall now addreſs you as a Chriſtian.—Death is only terrible to the wicked. But it is not ſo much the fear of their diſſolution, as the ſentence of hell, which they deſerve, that is ſo terrible to them. The fear of death by ſuch a one, is ſwallowed up in the fear of the torment that follows their death. The apprehenſion and horror of being damned, I do not ſay, will cure all other pain and ſadneſs, but certainly it will ſwallow it up: But I, who by the merits of my Redeemer, who by the grace of the Lord Jeſus, do believe I ſhall be ſaved, I do deſire you to conſider with me, how great is my joy? How infinite is my advantage by this exchange? How unſpeakable is the glory? And how excellent is the recompence for all the hard marches and the ſufferings in this world?

"My

"My Lords! take the advice of your dying Prince. Let us so prepare ourselves against changes, as always to expect them; that so we may not be surprized, when they come. Oh Death! how bitter art thou, to a man who has promised himself ease and plenty for many years, by his large possessions! It was a sad arrest, that his Soul was taken from him that very night!

"Consider with me, that afflictions are often the occasion of great spiritual advantages; we ought not to look upon them, as they sit heavy upon us, but as they serve unto the ends and purposes of God's eternal Providence. God esteemeth it one of his perfections, to bring good out of evil. Therefore we ought to leave the government of the world, as he himself pleaseth: and we are patiently to wait till the change cometh, and not to envy the happiness and prosperity of our enemies. Fret not thyself, saith King David, because of him whose ways do prosper, *&c.*

"The last great trial is death; but it is of all things the most unreasonable to grieve for this. Because it is unavoidable. It is not so much to be minded how long, as how well we live; for that life is most best which is most virtuous and honourable; not for its number of years. The shortening of our days is an evil wholly depending upon opinion. Let us always be ready for death, and it cannot come too soon; because let us die old or young, we have still an *immortal soul*, and do lay down our bodies only for a time; as that which was the instrument of our cares and troubles, and the scene of sickness and disease. Let us not then (my Lords!) fear that, which delivers us from all those infirmities; for by fearing it, we shall never the sooner escape it; but make ourselves more miserable. To die is natural and necessary; but that only makes a Man miserable, if he dies meanly and basely. He that depends only upon external things for his felicity, can be no longer well than during the pleasure of his enemy, a thief, or a tyrant.

"But blessed is he, who willingly resigneth his soul into the hand of God, who gave it; as into the hands of a blessed Creator and Redeemer. O blessed Jesus! thou didst die for me; grant that I may with joy obey thy summons; for thou art my mediator and advocate, as well as my judge; and thou didst come into the world to save sinners. I confess that I am a great sinner, O Lord! but thy mercy endureth for ever. O God of mercy, and Father of all comfort, look upon the sorrow of thy penitent servant; my sins lie heavy upon me, and press me sore, by reason of thy hot displeasure. My afflictions seem to be without comfort, because they are the punishment of my sins: my sins have caused my sorrow; yet my sorrow doth not cure my sins; and unless thou, O Lord, for thy own sake, and merely because thou art good, art pleased to have mercy on me, I shall be left without remedy and comfort. O Lord look with an eye of pity upon thy servant: I can do nothing of myself: I depend wholly upon thee, and upon thy blood and merits, who hast redeemed me. Let thy grace refresh my spirits; let thy comfort support me in this great warfare between life and death; and let thy mercy pardon me, for

thou art good and gracious, and I truſt only in thy mercies and promiſe of Salvation to all them that truly come unto thee. Suffer me not to let go my hold, which I have thro' faith in thy blood: and do thou with me, as ſhall ſeem good in thine own eyes: thou art able to pardon the moſt miſerable ſinner. Oh make me the object of thy mercy in my death, as well as in my life. And ſhould it be thy will to remove me at this time from this vale of miſery, and to releaſe my ſoul from the priſon of this body, let it be received by angels; let it be preſerved from the horror and ſurprital of evil ſpirits; and let it be kept in the boſom of my Saviour, until the day of thy ſecond coming to judge the world; when it ſhall be re-united to the body, to receive the final ſentence of happineſs or miſery. I doubt not but that I ſhall be raiſed up to joy, to live for ever, and behold the face of God in the glory of our Lord Jeſus Chriſt; who is my hope, my reſurrection, and life; my bleſſed and ever glorious Redeemer: to whom with the Father and the Holy Spirit be given all honour and glory, now and for evermore."

Soon after the King ſtooped his anointed head as low as death, and, in the prime of life, wiſely exchanged a ſcene of trouble in this world for the happineſs of Heaven, and a temporal crown for a crown of immortality.

MECHANIC ARTS.

Of Skins, and the Manner of Dreſſing Them;

With a Copper-Plate, *repreſenting a* Tanner's-Shop.

THE firſt manufacture we read of in hiſtory, is the application of Skins, for the covering the human body, and for tents in the antediluvian world: and tho' the neceſſities of man after the Flood obliged him to provide more extenſive coverings, and more eaſy to be renewed; yet the invention of Cloathes did not baniſh the uſe of Skins: they were only reſerved for the moſt important and honourable uſes.

After-ages improved the ſervice of Skins, by ſeveral ſorts of Dreſſing, which render ſome of them more beautiful, and others proof againſt wet, or make them more ſouple, and imbibe them with an oily humour; ſo that neither water can ſoak thro' them, nor drought eaſily ſhrink or harden them.

The workmen, who dreſs them, are of two ſorts; one prepares the Furs, or dreſs certain delicate Skins with the hair on; the other ſort, get off the hair or wool, and penetrate them with ſubſtances, proper to render them firm or pliant.

The firſt ſort are called *Skinners* or *Furriers*; whoſe employment is either only ſimply to preſerve the Skins in their entire natural furs, and to make them fit for uſe; or to penetrate, ſouple, and ſtrengthen the Skins by means of oil, on the fleſhy ſide only; for the hair ſide is carefully covered during the operation.

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The second sort generally dresses Skins without the hair: this sort is divided into several classes, each of which has some peculiar art and method; and they all have some operations in common.

They all in common cleanse their skins from blood and impurities in a running water; set them to drain: then beat them well in a tub or butt; put them into a pit boarded with wood or stone, and mortar, in the ground, filled with water, in which quick-lime is dissolved, in order to loosen the hair, so as to rub it off without injuring the skin.

Then they draw them out of the pit, and set them again to drain at the edge of it; stretch them on the leg or horse, which puts them in a proper situation to scrape off the hair with a blunt iron knife, or with a cylinder of wood. They pare off the flesh and membranes on the fleshy side, and the roughness, if any found, on the grain side, with a sharp knife: then they rub the skin with a whet-stone, while it still remains on the horse, to take off any particles of the lime or other thing, which may occasion hardnesses: they thicken them by different sorts of powders, whereby they become greater in bulk, and so much lighter, as gradually to rise to the surface of the water; then they stretch them out green or half dried, and rise one over another, or put them separate, after dried to a crust, and at last hang them out on poles, &c. to air; which must be done several times in dressing small skins.

Natural Philosophy would be much embarrassed to settle the order and great number of these operations by dint of reason only: But what the most penetrating genius has never been able to invent, the frequent handling of the same thing brings a man to practise with success; common workmen do the same thing by habit; and the overseer or foreman of the work, whose experience makes up all his philosophy, judges of the degree of dryness and moisture, hardness and softness; determines justly, and either repeats, lengthens, or shortens the processes.

In particular, the Allum Leather-dresser undertakes to dress all sorts of white leather, from the ox hide to the lamb-skin. The dressing leather for a sadler's use, he uses only bran, sea-salt and allum; but for glover's use, he uses not only bran, sea-salt and allum, but he makes a kind of pap of fine flour, and yolks of eggs, mixed in hot water; with which the skins are daubed and fed in a trough.

The Shamoy-dresser soaks the skins, he dresses, in oil.

The Tanner uses the bark of young oaks, ground in a Tanning Mill, (*see the Figure*) in which he soaks skins more or less, according to the different services expected from them, whose chief use is to remain firm and to keep out water.

The skins dressed by the Tanner with lime and bark are sent in crust to the shoemakers and other tradesmen, who employ hard leather; the rest are softened, and sometimes coloured by the Currier, whose chief business is to soften and souple cows and calves skins, for upper-leathers and quarters of shoes, coverings of

The ſecond ſort generally dreſſes Skins without the hair: this ſort is divided into ſeveral claſſes, each of which has ſome peculiar art and method; and they all have ſome operations in common.

They all in common cleanſe their ſkins from blood and impurities in a running water; ſet them to drain; then beat them well in a tub or butt; put them into a pit boarded with wood or ſtone, and mortar, in the ground, filled with water, in which quick-lime is diſſolved, in order to looſen the hair, ſo as to rub it off without injuring the ſkin.

Then they draw them out of the pit, and ſet them again to drain at the edge of it; ſtretch them on the leg or horſe, which puts them in a proper ſituation to ſcrape off the hair with a blunt iron knife, or with a cylinder of wood. They pare off the fleſh and membranes on the fleſhy ſide, and the roughneſs, if any found, on the grain ſide, with a ſharp knife: then they rub the ſkin with a whet-ſtone, while it ſtill remains on the horſe, to take off any particles of the lime, or other thing, which may occaſion hardneſſes: they thicken them by different ſorts of powders, whereby they become greater in bulk, and ſo much lighter, as gradually to riſe to the ſurface of the water; then they ſtretch them out green or half dried, and pile one over another, or put them ſeparate, after dried to a cruſt, and at laſt hang them out on poles, &c. to air; which muſt be done ſeveral times in dreſſing ſmall ſkins.

Natural Philoſophy would be much embarraſſed to ſettle the order and great number of theſe operations by dint of reaſon only: But what the moſt penetrating genius has never been able to invent; the frequent handling of the ſame thing brings a man to practiſe with ſucceſs; common workmen do the ſame thing by habit; and the overſeer or foreman of the work, whoſe experience makes up all his philoſophy, judges of the degree of dryneſs and moiſture, hardneſs and ſoftneſs; determines juſtly, and either repeats, lengthens, or ſhortens the proceſſes.

In particular, the Allum Leather-dreſſer undertakes to dreſs all ſorts of white leather, from the ox hide to the lamb-ſkin. In dreſſing leather for a ſadler's uſe, he uſes only bran, ſea-ſalt and allum; but for glover's uſe, he uſes not only bran, ſea-ſalt and allum, but he makes a kind of pap of fine flour, and yolkes of eggs, mixed in hot water; with which the ſkins are daubed and fed in a trough.

The Shamoy-dreſſer ſoaks the ſkins, he dreſſes, in oil.

The Tanner uſes the bark of young oaks, ground in a Tanning Mill, *(ſee the Figure)* in which he ſoaks ſkins more or leſs, according to the different ſervices expected from them, whoſe chief uſe is to remain firm and to keep out water.

The ſkins dreſſed by the Tanner with lime and bark are ſent in cruſt to the ſhoemakers and other tradeſmen, who employ hard leather; the reſt are ſoftened, and ſometimes coloured by the Curriers, whoſe chief buſineſs is to ſoften and ſupple cows and calves ſkins, for upper-leathers and quarters of ſhoes, coverings

of

of coaches, and for other things, to keep out water; and yet ſo pliant as to receive a handſome ſhape, or to facilitate motion by their giving way.

For this end the Currier ſoaks the ſkins received from the Tanner in common water, to take off the remains left of the fleſhy fibres; which is done by ſtretching them upon a horſe; then he lays them on a hurdle and treads them, till they become ſoft and pliant; after which he ſoaks them in train oil, and then ſtretches them out upon large tables, where he Curries them, or folds, ſqueezes, and moves them backwards and forwards with a tool called a Puminel.

The ſkins thus Curried may be made black or white: they are made white by rubbing them with chalk or white lead, and afterwards with a pumice-ſtone. As calves leather is generally required to be thin, the Currier uſes a round paring knife with a good edge, and an opening in the center big enough to let both hands through, in order to manage it with ſtrength: the ſkin is faſtened tight on the paring horſe or frame, which has a croſs bar at top, and is open at bottom: the workmen pulls it down with a cord that ſecures both ends, and goes round his own body. In this poſition, he rubs it with chalk, and pares it with his knife, till he makes the ſkin as thin and white as required.

If the ſkin is to be made black, it is alſo oiled and dried; but then he wets it with a bruſh dipt in water impregnate with iron: then he wets it a ſecond time with a water prepared with ſoot, vinegar, and gum-arabic. And theſe operations are repeated till the ſkin receives a ſhining black.

The grain and wrinkles, which contributes to the beauty of calves and cows leather, are made by the reiterated folds given to the ſkin in every direction, and by ſcraping off the hard parts on the coloured ſide.

ADVICE to SENATORS,

In a diſcourſe from an old Gentleman to two young Members of promiſing Parts, of the Aſſembly at Jamaica; ſpoken Oct. 5. 1745.

Gentlemen,

I Deſire, for the honour of you both, and the intereſt of this iſland, I may be heard a few moments with patience and attention.

No man ſhould undertake to ſerve in the Aſſembly who does not think himſelf under an indiſpenſible obligation to give his conſtant attendance; it is a public concern, and the truſt is ſacred. As for thoſe, who may at any time abſent themſelves, upon the hopes of obliging, or fear of diſobliging any perſon, they obſerve a dishonourable neutrality; having neither the courage to oppoſe what they judge to be wrong, nor the honeſty to ſtand by what they think is right; they are ſoldiers who hide themſelves in the day of battle. You are young men; you are our expectation and our hope: I have been deceived in my co-temporaries; let us not

not upbraid our ſons; ſuffer not yourſelves to be regimented; maintain your birth-right; preſerve your freedom as a pledge of your integrity: read, hear, debate, and then determine.

Enter the houſe as the temple of liberty; when you riſe up to ſpeak, affect not to ſhew your rhetoric, neither condeſcend to be witty; a jeſt is prophane in a Senate.

Let your ſpeech be grave and pertinent, and your expreſſions manly, rather than delicate: above all things avoid bitterneſs of language, and terms of reproach: you meet not to revile, but to reaſon; you meet as friends and countrymen, fellow-citizens and fellow-labourers, for your ownſelves and the commonwealth. The beſt man may err in his judgment, and even a diſingenuous ſpeaker is moſt effectually refuted without paſſion. Be not aſhamed to be convinced by an adverſary. Adhere to truth. Remember your pariſhes do not ſend you to the houſe to give an opportunity to make your own fortunes, but to take care of theirs; beware therefore how you beſtow your voice, it is the voice of your country. Laſtly,

Remember you are called together by royal proclamation, to ſit for the diſpatch of divers weighty and important affairs. Let your deliberations be void of animoſities, clear of all intereſts but that of the community, and free from all paſſions but the love of your country. If there be not wiſdom in the multitude of counſellors, the confuſion will be great in proportion to their number.

P.

The deteſtable Character of CONQUERORS; exemplified in the Cruelty of ALEXANDER the Great, at GAZA.

BEHOLD Alexander the Great's Cruelty at Gaza! where having put ten thouſand of the brave enemy to death, in cold blood, and ſold all the reſt, with their wives and children, into ſlavery, only becauſe he had by their valour been retarded two months in beſieging that city, in his way to Egypt, and was dangerouſly wounded, he ordered Betis, (the faithful and brave governor thereof, under King Darius, and taken alive in the ſtorm, that carried the place,) to be brought before him: But inſtead of receiving him in a manner ſuitable to the valour and fidelity of ſo good a commander, as a generous conqueror ought to have done, Alexander ordered his heels to be bored and a cord to be drawn thro' them; by that to be tied to the arſe of a carr, and dragged round the city till he died; boaſting that herein he imitated his progenitor Achilles, who, as Homer relates, dragged Hector round the walls of Troy: But that was a barbarous act in the example; much more ſo in the imitation. For it was only Hector's dead carcaſe that Achilles dragged round Troy; but Alexander thus treated Betis while alive, and made him die in this cruel manner, for no other cauſe, but that he faithfully and valiantly ſerved his maſter in the poſt committed to his charge; which was deſerving of a reward even from an enemy, rather than a cruel puniſhment.

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The young Conqueror might be hurried on to this cruel act by the too great fondneſs he at all times expreſſed for the actions of Homer, which he made the rule of his actions, inſtead of the true principles of virtue and generoſity. And as Achilles was the great hero of his admired poem, he thought every thing ſaid of him in it, to be worthy of his imitation, and the readieſt way to make him a hero alſo: and the vanity of being thought ſuch, and the eager deſire, which he had, of making his name in like manner to be celebrated in after-ages, was the main compulſive cauſe of all his undertakings. But in reality, were all his actions duly affirmed, he would deſerve no other character than that of the *Great Cut-throat* of the age, in which he died.

But the folly of mankind, and the error of hiſtorians is ſuch that they uſually make the actions of war bloodſhed, and conqueſt, the ſubject of the higheſt encomiums; and thoſe their moſt celebrated heroes, who moſt excel therein. In a righteous cauſe, and the juſt defence of a man's country, all actions of valour are indeed juſt reaſons of praiſe: but in all other caſes, victory and conqueſt are no more than murder and rapine, and every one is to be deteſted, as the greateſt enemy to mankind, that is moſt active therein. Thoſe only are true heroes, who beneſit the world by promoting the peace, welfare, and good of mankind: but ſuch as oppoſe it with the ſlaughter of men, the deſolation of countries, the burning of cities, and the other calamities which attend war, are the ſcourges of God, the Attilas of the age, in which they live, and the greateſt plagues and calamities that can happen to it, and which are never ſent into the world, but for the puniſhment of it: and therefore ought, as ſuch, to be prayed againſt, and to be deteſted of all mankind.

To make theſe the ſubject of praiſe and panegyric is to lay ill examples before princes, as if ſuch oppreſſions of mankind were the trueſt way to honour and glory. And it is too plain, by the little regard paid to treaties, leagues, and oaths in ſome courts, that the like vain and falſe notions of gaining glory this way, is that grand impulſe upon the minds of princes, which moves them to moſt of thoſe deſtructive wars upon each other, whereby the peace of the world is ſo often diſturbed, and ſuch miſchiefs and calamities are brought upon mankind.

THE TOWN.

Under this general Title, we propoſe to reduce all the Topicks *of the month, which ſhall in any wiſe appear worthy of the Attention of the Public, agreeable to the Sentiments of a judicious Correſpondent, in order to unite* in one Body, at a cheap Price, *whatever is worth peruſal, and ſcattered in different Publications throughout the Month.*

NATIONAL SPIRIT, in the ENGLISH GOVERNMENT, and an ENGLISH SUBJECT, in the Reign of King GEORGE I.

IN the reign of John V. King of Portugal, and in the year 1723, Meſſrs. Wingfield and Roberts, Partners, in an eminent houſe of trade at Lisbon, were ſeized with all their Effects, their

their perſons impriſon'd, and a criminal proſecution commenced againſt them, for having in their cuſtody a large quantity of gold duſt not entered, from the Brazils, and for ſhipping off the coin of the kingdom; the penalty for which was, and is yet, DEATH, by the antient laws of that kingdom.

The cauſe of this proceeding was an information lodged againſt them by one Hackſhaw, the ſon of him, who was the firſt contractor, or farmer of tobacco, under K. Peter II. and who had lately been an inferior partner in the houſe, but diſcarded on account of his turning Roman Catholic, and marrying a Portugueze woman. This was therefore looked upon either as an act of revenge, or a means to enrich himſelf with that part of the ſeizure, to which he was intitled as the informer.

So extraordinary a proceeding ſtruck, as it well might, all foreign traders at Liſbon with the utmoſt conſternation; and on the Exchange of London the news of it produced the ſame effect. The late Sir John Warde, who had a large property inveſted in trade with that houſe, upon receiving intelligence thereof immediately waited on the Secretary of State, who then was, I think, Lord Carteret, afterwards the late Earl Granville, who laid the whole matter before the King and Council, and was directed thereon to make the ſtrongeſt remonſtrances to the Court of Portugal. But his late Moſt Faithful Majeſty, who was a very high ſpirited Prince, and who, agreeable to the genius of his nation, deemed it diſhonourable to recede from his own meaſures, however unjuſtifiable they might be, made for anſwer, that he ſhould ſupport the laws of his kingdom; which anſwer, when delivered here, cauſed his Majeſty, King George the Firſt, to tell the Miniſter of that Crown at this Court, That the goods and merchandize which his ſubjects had ſupplied the Portugueze nation with, ſhould be paid for; and he ordered a fleet to be equipped with all haſte.

While the fleet was getting ready, the ſeveral Merchants of this metropolis reſpectively notified to the Portugueze Miniſter in form, wherever they could meet him, even at his entrance into the palace, their demands on his country for effects, which they had there. Theſe alarming proceedings, and the appointment of the late Sir Charles Wager to the command of the fleet, which was preparing, with the very hoiſting of his flag at Portſmouth, cauſed the Portugueze Miniſter then at London to diſpatch a meſſenger over land with orders for making ſuch haſte, that the journey was performed in the ſhorteſt ſpace of time ever known: and the effects of the intelligence he carried will plainly appear.

The priſoners at Liſbon, from the firſt hour of their commitment, were conſtantly adviſed by all their friends, countrymen, Portugueze, and others, to ground their defence on a denial of the charge: But, Mr. Wingfield, who was an elderly man, of great knowledge in trade, the richeſt Engliſh Merchant of the place, and had a dignity of ſpirit worthy of an ancient Roman, or, I will ſay, of an ancient Engliſhman, (oh! that we were not therein ſeen to be ſo faſt degenerating) acted a part that was more becoming of a wiſe and virtuous man. He allowed the truth of the charge; and undertook to prove in his defence, that the mine of gold could not be worked in Brazil, the people of Portugal fed and

clothed, nor the great Royal Revenue raised by the Custom-house be secured, by any other means: That whatever Portugal or her Colonies had to part with was taken off their hands by foreign nations; that whatever she wanted from them more than to the amount of such products, must be paid for in money; that the gold of her mines was no other than a commercial commodity, which she only could obtain herself by the means of parting with a share of it, and therefore the existence of that ancient law, which prohibited the exportation of it, however wise and necessary it might have been when gold was no actual or principal commodity of the kingdom, would prove injurious to the state if continued in force, being, from the changes and chances of time, rendered impossible to be observed.

The process of the Portugueze Courts in these cases is very tedious, and dispatches from London carried over land put his Portugueze Majesty upon thinking of expedients for extricating himself from the difficulties in which his rash conduct had involved him, and, if possible, to save his credit in appearances, not only in the eyes of the people, but also in those of all others in Europe. He therefore ordered the Judges to bring the process to an immediate conclusion, and pass judgment thereon, according to the laws of the land; and at the same time prevailed on the British Envoy to dispatch either a man of war or pacquet (for I do not recollect which) to stop the sailing of the fleet from England, on the pledge given of his Royal Word, that their liberty and effects should be restored to the Prisoners.

This precaution used, for guarding himself from the appearances of submission from constraint, he then proceeded to the bringing of matters to a conclusion with the Prisoners. The Judges presented to him the process (which in all judicial cases whatever is there carried on upon Paper, like Chancery suits in England) and with it their sentence, which was that of death to the Prisoners. On the following morning, the Marquis of Gouvea, hereditary Lord Steward of the Household, which is the highest Court Office, accompanied by the Judge, whose office is similar to that of Lord Chief Justice of England, went to the Prison, where he found Mr. Wingfield in company with an English Merchant who was his friend, playing at Backgammon; neither of whom knew of the Sentence that had been passed, nor was the errant on which the ship had been dispatched to England known to any but the King, his principal Ministers, and the British Envoy.

The Marquis addressed Mr. Wingfield with all that great politeness, which characterizes the Portugueze Nobility, and apologized for his being specially commanded to be present at a ceremony that must prove painful to them both, though accompanied with what he hoped would be productive of joy. The sentence was then read; and after it the King's pardon, with a decree for the *entire restoration of his effects*. Mr. Wingfield heard all with the utmost composure; and then expressed his thanks to the Marquis and Judge, for their politeness on the occasion, but shewed no sense of any favour he had received of the King.

Such was the manly conduct of this real worthy man. Of Mr. Roberts I shall say no more, than that he received a like sentence and pardon.

This

This anecdote was communicated to the Ledger by one, who signs himself *Mercator*; and is desired to excuse some little variations in this account, by one who was particularly acquainted with Mr. Wingfield, and at Lisbon during the whole proceeding.

The CHARACTER *of the Virtuous* PLINY, *Prime Minister to the Emperor* Trajan; *drawn by the Earl of* Orrery, *and, in a Letter, addressed by his Lordship to his Son* Charles, Lord Boyle, *he earnestly recommends to him that disinterested and uncorrupt* Statesman, *as an* Example *for his* strict imitation.

Rise, my Charles, a Right Honest, preferable to a Right Honourable Man.
Lord Orrery.

PLINY was a singular instance of that primitive simplicity, that integrity of manners, and that sweetness of disposition, which must render a man amiable to his cotemporaries, and honoured and admired by all posterity. He passed the earlier part of his life in sanguinary, suspicious, unsettled times; and he afterwards filled employments of the highest dignity and power. The latter situation was no less dangerous than the former; it was open to all the blasts of envy, rancour, and revenge; yet, by the uprightness of his heart, the excellency of his genius, and the exactness of his prudence, joined to that proper humility, which is neither basely servile, nor secretly ambitious, he rode through the storm with great triumph, boldly, prosperously, and unhurt. His most threatening hazards proceeded from his strict friendship, and firm affection to all those whom he honoured with his esteem, or admitted to his bosom. The sincerity of his nature made his actions ever accompany his promises; he was true to his professions, and pertinacious in his good offices; never to be alarmed by perilous difficulties; never to be wearied by labour or opposition. He was one of the best, and one of the greatest men, that any age has produced; second to none in virtue; equal to most in accomplishments of high birth by his ancestors; but much more ennobled by himself. In the various stations of private life, he discharged every duty with piety and exactness. He was an affectionate, endearing husband, an unalterable and a courageous friend; to his servants a tender and a careful master; to his associates an easy, and often a facetious companion; grave without severity; witty without ill nature; open without imprudence; a splendid original, whom few can copy, but whom all ought to imitate. And if, on the other hand, we examine him in his public character, as a Statesman, and First Minister to Trajan, he will be acknowleged one of those rare spirits who seem allotted by heaven as blessings upon earth. The due course and administration of the law, the glory of the commonwealth, the interest and prosperity of the Emperor, were the moving springs to all his actions, and the sole end of his most secret designs. His views neither centered in himself, nor in his own family; they were dilated universally, and took in the whole. He was equally the faithful servant of the Empire, of the People, and of the Prince. He was indefatigable in business, and immovable in patriotism. Threats could not alarm him, bribes could not allure him. Thus, above fear and above temptation, he became a shield to his fellow-citizens, an ornament to the Republic, and a support to the Emperor. He was an elegant scholar, an excellent philosopher, and a powerful orator; the patron and example of those arts and sciences, which he cultivated and admired. His abilities were only to be exceeded by his candour and integrity; so that amongst the most celebrated names of antiquity, scarce any name will be found adequate to Pliny.

Queſt. 51. *Anſwer'd by Mr.* Dalby.

THIS Queſtion is eaſily ſolved, thus: Put $b=$; $a=3$; $c=,7854$; $r=627264c$, the ſquare inches in an acre; $p=60$, the ſhillings in 30*l.* And put $bx=$ tranſv. $ax=$ conjug. of the required Ellipſis; then per known Theo. $\frac{3,1415b^3x}{b^2-a^2}$ will be the length of its periphery, or number of ſhillings that would circumſcribe it (here x is ſuppoſed $=$ inches:) But $\frac{cabx^2}{s}$ is the number of acres the field contains; and $\frac{cabpx^2}{s}$ its coſt in ſhillings; whence $\frac{cabpx^2}{s}=\frac{3,1415b^3x}{b^2-a^2}$ or $\frac{cabpx}{s}=\frac{3,1415b^3}{b^2-a^2}$, whence $x=21770,3967$ &c. and the area $=890,86$ &c. acres, at 30*l.* per acre, comes to 26726*l.* 8*s.* nearly.

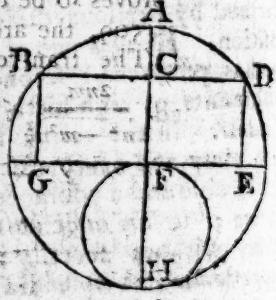
With ſome variation this Queſtion was anſwered by Meſſ. Rawle, Sewell, Smith, Hall, Barker *and* Salter.

Queſt. 52. *Anſwered by Mr.* Wm. Sewell *of* Wymondham.

SInce x and y in the given equations conſiſt of integral numbers, it evidently appears (per 1ſt) that x is a ſquare number, and probably either 16 or 25; put $x=16$ her age, which ſubſtituted in the 2d, and ſolved, gives $y=\frac{\sqrt{25^2+10240}-16}{2}=500$ pounds, her fortune.

Meſſ. Dalby, Probert, Smith, Barker, Rotheram, Salter *and* Husbands *anſwered this Queſtion.*

Queſt. 53. *Anſwered by Mr.* Robert Hall.

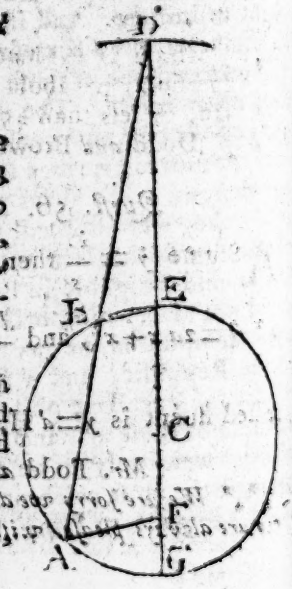


PUT $b=$EH$=25$, $d=$AF$=35$, $x=$CF, then $d-x=$CA, $b+x=$CH and $\sqrt{hd-bx+dx-x^2}=$CD per *Eutlid*, and $\sqrt{40dx^2-40bx^2+4dx^3-4x^4}=$ area BCDEG a Maximum. In Fluxions $80dx\dot{x}-120bx^2\dot{x}+120dx^2\dot{x}-16x^3\dot{x}=0$. Solved $x=25=$CF$=$DE and BD$=44,72134$, and the area $1118,0385=$.

Meſſ. Sewell, Rawle, Dalby, Gough, Smith, Rotheram, Dodd, Barker, Cetii, Todd, *and* Salter *anſwered this Queſtion.*

Queſt. 54. *Anſwered by Mr.* George Brown.

The Geometrical Conſtruction.



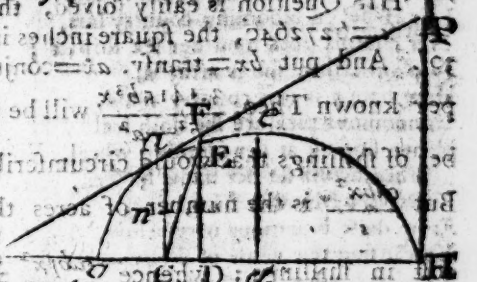
UPon C as a centre, with the radius CE $=472=235$, deſcribe the circle EBAGE; take AB $=390$, and upon C, with the radius CD $=300+450=705$, deſcribe an arch of a circle cutting AB, produced in D; draw DG, EE, and thro' A draw AF parallel to BE; then EF will be the perpendicular of the Triangle required.

Method of Calculation.

From the conſtruction DB$=497.694016$; then as BD : DE :: DA : DF$=368.298581$; and DF$-$DE$=$EF$=368.298581=$perpendicular, and per 47 *Euc.* 1. baſe $=291.903566$; the ſides required.

Anſwered by Meſſ. Dodd, Rotheram, Gough, Sewell, Dalby, Barker, Cetii, Todd, Salter *and* Rawle.

Queſt. 55. *Anſwered by Mr.* T. Todd.



IF m=AC, n=Ca, to AC, x=CD, and y=DE, then by ſim. Triangles, $m : n :: m+x$ (AD) : DF=$n+\frac{nx}{m}$=CE by the Prob. ∴ (by 47 *Eu.* 1) $n+\frac{nx}{m}\Big|^2-$ $x^2=y^2$, the general equation of the curve, whoſe locus is a conic ſection: Hence, the curve will be an hyperbola, parabola, or ellipſe, according as the angle A, is greater, equal to, or leſs than 45°, the laſt of theſe being the caſe of Mr. *Brown*'s figure, the tranſverſe, and conjugate axis, may be determined as follows.

If $y=o$, then $x=\frac{nm}{m-n}$ (=CH=HP,) and when x is a maximum, then $x=\frac{mn^2}{m^2-n^2}$ (=C*d*) ∴ $\frac{nm}{m-n}-\frac{mn^2}{m^2-n^2}=\frac{nm^2}{m^2-n^2}$=*d*H=*dg*, the ſemi-tranſverſe, and by writing $\frac{n^2m}{m^2-n^2}$ for x in the equation of the curve, gives $y=\frac{nm^2}{m^2-n^2}\Big|^{\frac{1}{2}}$=*de*, the ſemi-conjugate; C, being the fixt point, which alſo proves to be the focus of the ellipſe. Whence by *Simſon*'s Fluxions p. 500, the arch of the ſemi-ellipſe becomes known.

Scholium. The tranſverſe and conjugate axis of the hyperbola are $\frac{2nm^2}{n^2-m^2}$ and $\frac{2nm}{n^2-m^2}\Big|^{\frac{1}{2}}$: The fixt point C is the focus, and $2n$= the parameter in every caſe.

The ſame anſwered by Mr. Cetii *of* Greenwich.

Let a be put =AC t=tang. of the angle A, x=CD, and y=DE. Then per Trigonometry 1 : $a+x$ :: t : $t\times a+x$=DF=CE per Queſt. from hence and *Euel.* 47. $\overline{t^2\times a+x}^2-x^2=y^2$ for the equation of the curve, which is evidently that of a conic Section, and may be either an hyperbola, parabola or ellipſis, according as the angle A is greater, equal to, or leſs than 45°

Meſſ. Dodd *and* Brown *the Propoſer alſo ſent elegant Solutions.*

Queſt. 56. *Anſwer'd by Mr.* George Brown.

ASſume $\dot{y}=\frac{\dot{x}}{s}$ then $\ddot{x}=\dot{s}y$ ∴ $d^2s=2\dot{x}\dot{x}+x\ddot{x}$, whoſe fluent is $d^2s^2=2ax+x^2$, and $\frac{d^2\dot{x}^2}{\dot{y}^2}=2ax+x^2$, or $\dot{y}=\frac{d\dot{x}}{\sqrt{2ax+x^2}}$, whoſe corrected fluent is $y=d\,\mathrm{H.L.}\,\frac{a+x+\sqrt{2ax+x^2}}{a}$, the required value of y.

Mr. Todd *alſo ſolved this Queſtion very elegantly.*

* * *We are ſorry we did not receive Mr.* Rotheram's *Letter ſoon enough, as we are always pleaſed with your Gentlemen's performances.*

Queſt.

Quest. 63, *Mr.* Philo Meritas.

NEAR to a curving river's side,
Within a cottage doth reside,
Fair Hebe! a blooming country lass,
Her charms does most her sex surpass;
In plain attire, she is array'd,
How happy is this country maid,
Harmonious pleasure she doth feel
When singing at her spinning wheel.
Then artists let her name be seen,
In Owen's Monthly Magazine,
From these Equations here below,
You'll find the name of Polly ——:

Note, $\begin{cases} x+y+z=36=a \\ \sqrt{x}\times y\times\sqrt{z}=128.6167=b \\ \sqrt{y}+xz=\quad 88.7416=c \end{cases}$

Quest. 64, *by Mr.* Jaques Husbands.

IN these * equations I have conceal'd,
My height and age to be reveal'd:
* $\overline{72030y-3x}+6xy=20691x$, and $xy^2+\frac{x}{y}=24010$.

Wherein x represents my height, and y my age.

Quest. 65, *by Mr.* W. Salter *of Bilston.*

IN an Ellipsis, there is given the sum of the transverse and conjugate diameters $=140$; and the rectangle of the conjugate and latus rectum is the greatest possible: also from the two foci lines are drawn to a point in the periphery, forming a triangle, in which the angle at one of the foci is given $=120°$. required the sides, angles, and area of the said triangle; also the dimensions and area of the said Ellipsis.

Quest. 66, *by Mr.* T. Barker *of* Wissett, Suffolk.

WHAT's the dimensions of a segment of a spheriod, made of cast brass $\frac{1}{16}$ of an inch thick; that shall be capable of carrying me, and my ingenious friend Mr. John Barber afloat at sea, with 25.2 inches above the water's surface; (which shall pass through the center of the generating Ellipsis.) Out weight (together, with liquor, provisions, tackle, &c.) being 6347.28 pounds averdupoise; and length of the half segment (at top,) $=48$ inches?

Quest. 67, *by Mr.* T. Adams.

TO find the Fluent of this Fluxion, without an infinite series,

$$\frac{4x^2\dot{x}}{a^2-3x^2}.$$

Quest. 68, *by Mr.* Geo. Brown *of* Portsmouth Common.

GIVEN the radius of a sector of a circle 20, and the angle 30°; to find the area of the greatest inscribed sector, when the angular point is in the middle of the arch of the given sector; also the limit of the given sector?

Note, my solution will be a sufficient apology, for proposing the above question.

Apparent Times of the Eclipses of Jupiter's Satellites, for February 1765, computed from M. S. Tables, for the Meridian of the Royal Observatory at Greenwich. by Mr. *G. Cetii.*

I. Satell. Emer.				II. Satell. Emer.				III. Satellite.					IV. Satellite.				
D.	H.	′	″	D.	H.	′	″	D.	H.	′	″		D.	H.	′	″	
1	20	59	56	3	12 *	47	29	1	12 *	23	28	E	4	5 *	17	36	I
3	15 *	28	20	7	2 *	6	3	8	16 *	23	24	E	4	9 *	11	32	E
5	9 *	56	50	10	15 *	24	53	15	17 *	7	23	I	20	22	21	44	I
6	4	25	20	14	4	43	51	15	20	23	25	E	21	3	20	40	E
8	22	53	58	17	18	3	8	22	21	7	16	I					
10	17 *	22	34	21	7 *	22	38	23	0	24	24	E					
12	11 *	51	19	24	20	42	15										
14	6 *	20	11	28	10 *	2	4										
16	0	49	0														
17	19	17	50														
19	13 *	46	42														
21	8 *	15	41														
23	2	44	38														
24	21	13	36														
26	15 *	42	39														
28	10 *	11	41														

These only which are marked with a * will be visible at Greenwich.

ODE *for the* NEW YEAR.

BRitannia's guardian pow'rs divine,
Beneath whose auſpices benign,
She rides as Queen o'er Ocean's plains,
And binds th' indignant Gaul in chains,
In kind regard attend and bleſs
Your Votary's prayer with wiſh'd ſucceſs.

Still with your pure celeſtial fire
Our glorious George's ſoul inſpire,
Of Kings the greateſt,—beſt:
His country's Father be the name,
By which he ſhall be known to fame,
His throne each ſubject's breaſt.

'Midſt peace's olive may the roſe
Of love its ſilken leaves diſcloſe,
In blooming beauty bright;
May Charlotte, partner of his ſoul,
Bid each gay circling minute roll,
Improv'd with new delight.

Faſt may the Royal bluſſoms ope
Their leaves, that fold Britannia's hope,
Like ſpring ſo ſweet and kind;
All manly charms adorn each face,
And Virtue's far ſuperior grace
Inform each Princely mind!

May Flatt'ry ne'er with Syren ſkill,
Her non-reſiſting lye inſtill,
To taint the Royal ear;
Away ye profligate and vain——
Ye good and juſt, an awful train,
To grace his Court appear.

May Peace and Plenty, the Wood-nymphs bland,
Walk unmoleſted thro' the land,
And ſtill ſubſiding faction's roar,
While terror ſhakes the Gallic ſhore.

A Lady on her Marriage. Addreſſed to Mr. William Swift.

SIR,

TO tell you marriage, which has been my lot,
Through every room of your houſe have I got;
The firſt he was Kitchen, a bonny Scotch blade,
As e'er drew a ſear'd, or e'er courted a maid;
The next was a Teague, which did nothing but baull,
As odd ſplut her nails; Sir, his name it was Hall.
Advancing my fortune and creeping up ſtairs,
Juſt into your chamber, (tho' quite in amaze)
Was ſeal'd by Monſieur, who did ſwagger and vapour,
Was bragging and ſwearing, and cutting a caper.
Advancing my fortune higher and higher,
I marry'd a Garret, he was an Eſquire,
Of Engliſh extraction, juſt come from the wars;
Said what feats he had done, and ſhow'd me his ſcars.
"Now as I've advanced my fortune ſo high,
"You like well a joke, Sir,—Yes I, and ſo "do I";
I pray, Sir, adverti'e in next month's Magazine,
Of four rooms to be lett, by an Indian Q——n,
A Kitchen, a Hall, a Chamber and Garret,
With things there pertaining.—Nay, I can't tell what.
And tell them the rooms are as freſh as when new,
The model exact, and the order as true,
And further then tell him at next Lady-day,
The rooms will be let; ſo no more I've to ſay;
They're all center'd in one, obſerve you but right,
So the firſt come, firſt ſerv'd, Lord, Earl, Duke or Knight.

Extract from the WIG; *a Burleſque Satyrical* Poem; *ſaid to be Written by* W. Woty.

GEnius! do thou aſſiſt my daring lay,
New robes put on to grace me on my way.
Oh! let me ſtart to light from Fancy's flint,
Freſh as a new-coin'd ſixpence from the mint,
And let her ſparks, tho' ſparkling from a ſtone,
Kindle a torch to blaze me to renown,
Is this too much! then grant another aid,
Lend me thy laſt new wig my brows to ſhade,
To cover warm, imagination's ſhell,
And hatch the Poem that will greatly *ſell*.
Aſſiſt my emprize—elſe the letter'd band
Will ſigh, will ſob, will ſicken thro' the land.
See ſupplicating bards around thy ſhrine,
The choiceſt groupe, that ever turn'd a line!
The bard of love, with tears who wets his lays;
The bard of Satire, and the bard of Praiſe,
Folly's pert brat, the laughing child of Fun,
The thing of Rebus, and no thing of Pun;
As well the builder of the loſty rhime,
As the corrector of acroſtic time,
As well the factor of a birth day ode,
As the twin rival of the Grub ſtreet mode;
As well the wiſe heads of a wiſe review,
As the ſuperior riddle-making crew;

As

As well thoſe nice, thoſe *taſteful* kind of men,
Who from a ſilver ſtandiſh draw their pen,
As thoſe, who from an inkhorn write for hire,
And cook their dinner by the muſes fire.
All, all kneel ſupplicant around thy ſhrine,
And aſk the poem of the *Wig* divine.
By the ſage buckles of the Lawyer's tye,
The foretop nodding o'er the Biſhop's eye!
By that grave, ſolemn, formal buſh of hair,
Which *Galen* wore not, tho' his baſtards wear!
By that ſurpriſing grizzle bob, which they
Put on, to look unnaturally grey
Before their time! by that amazing wig
In which ſmall D———y appears ſo big;
And by the Tyburn top of modern make,
That ſo diſtinguiſhes the city rake!
By that white ſwelling of enormious paſte,
Which Ludgate Mercers wear and think it taſte!
(Thoſe ſtiff-neck'd ſtatues, ſo preciſe and prim,
As if 'twas criminal to move a limb;
Thoſe male, thoſe female, thoſe ambiguous creatures,
With ſuch hermaphrodite, unmeaning features,
One knows not male or female which to call,
They're both, they're either, and yet none at all)
By each large, pompous, ſcientifick lock,
That winds ſuch meaning round the head of *Rock*,
By the cork bob, that ſits ſo ſnug and tight,
Whoſe light formation wraps a head as light,
Worn by each jemmy of a country town,
To make him look more clever than the clown!
Let me conjure thee to aſſiſt my ſong
By theſe, and all the blocks, to which theſe Wigs belong.

ÆNIGMA *for the Ladies.*

THE improvements I've made, in commerce and trade,
You ſe ice with preciſion can ſcan:
Who firſt found me out, admits of ſome doubt;
Tho' I owe my conſtruction to man.
That there was a ſuch thing, before David was King,
The ſcriptures do plainly expreſs:
If to ſearch you're inclin'd, you there will me find;
If you luckily hit on the verſe.
Without my aid, no lady brocade,
Nor the prieſt his caſſock could wear:
From the King on the throne, to the country clown,
Would like their firſt parents appear.
For ſwiftneſs ſublime, I'm an emblem of time,
And can many more properties ſhow:
But what I have reveal'd, I'm no longer conceal'd
From the wit's at *Marb'ry* or *Stow*.

ÆNIGMA *addreſſed to Miſs* Polly Stow.

TO you dear Miſs, I do addreſs,
My ſelf, tho' you muſt me expreſs.
I am your friend, and by my aid,
Your ſecret thoughts are oft diſplay'd.
At morn, and night, I you attend,
At noon, I am your abſent friend,
Both Swift, and Pope, they write on me,
Whilſt Addiſon he is ſo free;
Yes! Clariſſa and Pamela,
And Grandiſon, there bears a ſway.
But I pleaſe more ye charming fair,
When you take off my head with care;
Than all theſe learned wits you ſee,
And with me you do make more free.
When I attend, dear Miſs, on you,
My livery's green, and ſometimes blue;
When belly's full, I'm lik'd the beſt,
And then I am the moſt careſs'd.
Tho' I'm your ſlave, and muſt obey,
Whilſt I'm kept under lock and key;
Then let dear Miſs my name be ſeen
By you, in next month's Magazine.

Sturton, Dec. 10, 1764. *T. Ford.*

An Anſwer to the Rebus in the Magazine for November, *p.* 551. *by* J. Thorne.

YOUR Rebus, Miſs Polly, does plainly ſhow,
William Swift is the man you wanted to know.

A REBUS.

THE name of a Monarch who once govern'd this nation,
And greatly ſubdu'd the Scots in that royal ſtation;
A bird for courage not exceeded by many;
And for ſwiftneſs of flight, not equal'd by any;
Theſe rightly connected will inſtantly declare,
The name of a hero that defeated Monſieur.

THE GENERAL MAGAZINE OF ARTS and SCIENCES,

The MONTHLY CHRONICLE, for *February*, 1765.

THE tranſactions of foreign nations, that have come to our knowledge in the courſe of the laſt month are not of that important voluminous nature, but may be related in the following articles:

In *Ruſſia*, the Empreſs ſeems intent upon every improvement to inlarge her dominions, and particularly, That ſhe is reſolved to work the mines in Siberia, which are reported to promiſe great quantities of Silver; and that her Imperial Majeſty has revived the long exploded attempt of finding a paſſage at Sea, by the North East to China and the East Indies, and had given the care and command of this voyage to Captain Tomkyns an Engliſhman, and formerly commander of the Briſtol privateer; a ſervice or diſcovery in which Sir Humphry Gilbert was loſt and periſhed, ſhip and all his crew.

Derwiſch Mehemed Effendi, Embaſſador, from the Porte, had his public audience of the Empreſs, at the winter palace, and was conducted thither with the ceremonies uſed on like occaſions towards the Oriental Embaſſadors, the court was extremely brilliant, and the garriſon, with drums beating and colours flying, was ranged on each ſide of the ſtreets where the proceſſion paſſed. The Embaſſador being introduced into the Hall of audience, made a profound bow, according to cuſtom, another in the middle of the Hall, and a third at ſome diſtance from the throne, where he ſtopped. Then, taking from his Kiaya the Sultan's letter, he gave it to the interpreter Rawitſch, who, walking backwards, carried it to the entrance of the Hall, where the officers belonging to the Ambaſſador ſtood, and holding it with both his hands, made a ſpeech in the Turkiſh language, which M. de Koſlow, actual Councellor of State, Firſt Maſter of the Requeſts, and Knight of the Order of St. Anne, read aloud a tranſlation of in theſe terms:

"My moſt illuſtrious, moſt powerful, moſt high in authority, and moſt great Lord, the Sultan of the earth, the Emperor of the ſeas, the Protector of the holy Jeruſalem, Sultan and ſon of a Sultan, Monarch iſſue of a Monarch, Sultan Muſtapha Khan, ſon of the Sultan Achmet Khan, born of the Sultan Achmet Khan, has condeſcended, by virtue of his friendſhip ſubſiſting between the two empires, to charge me, moſt humbly to preſent this letter to your Imperial Majeſty, the moſt illuſtrious, and moſt powerful Empreſs of all the Ruſſia, Lady and Sovereign of a great number of ſtates thereunto belongings, as well to maintain and render more ſolid the treaty of perpetual peace, as to congratulate you on your happy acceſſion to the throne."

The reading of the letter being over, the Vice Chancellor, on a ſign being made by the Empreſs, took the letter, laid it on a table covered with a cloth of gold, on the right hand of her Imperial Majeſty, and made the Ottoman Ambaſſador the following anſwer in the Ruſſian language:

"Her Imperial Majeſty receives, on the part of the Grand Seignior, the let-

ter of congratulation on her acceſſion to the throne, the object of the miſſion of the Ambaſſador, with a ſatisfaction ſo much the more perfect, as this letter is the re-eſtabliſhing of the friendſhip and perpetual peace which ſubſiſt ſo happily between the two empires; an union which her Imperial Majeſty will ſtrive to maintain inviolably."

M. Turkſchanimow, Secretary for foreign affairs, explained, in the Turkiſh language, this anſwer to Mahomed-Effendi, who liſtened to it with great attention, and ſeemed ſatisfied therewith. Upon which the Vice Preſident Neplujew, and the Maſter of the Ceremonies, who, during the audience, had ſtood near the Ambaſſador, took him under both arms and conducted him, going backwards all the way, out of the Hall of Audience, where he made three bows, as at his coming in.

In *Poland*, the ſtates of this kingdom have left to their King's pleaſure the diſpoſal of every thing relating to the diſpatch of Miniſters to foreign courts to ſignify his coronation; and the King has ordered the Commiſſion of the Treaſury to make out a plan for the payment of the Tolls, and recommended moderation in the duties on merchandize. The Ruſſian troops have orders and are preparing to return home.

The Diet held at Warſaw has not terminated as amicably as was expected. In the ſeſſion of the 15th, the power of the Great Generals was diſcuſſed, and it was propoſed to reſtrain that of the Great General of Lithuania, conformably to the decree pronounced by the Diet of Convocation relatively to the Great-General of the Crown. Accordingly both the Great and Little General of Lithuania were fervently exhorted to conſent to this diſpoſition of the Republick: The King even called them to his throne to engage them to it: All the Senators roſe up from their places to entreat them: The Equeſtrian Order preſſed them from the top of their benches to make a voluntary reſignation of their authority, and to conſent to the eſtabliſhment of a commiſſion: but nothing could bend them. The Biſhop of Wilna, ſon to the Great-General of Lithuania, ſpoke with very great force in defence of his father, repreſenting to the Republick the dangerous conſequences which would reſult from a diminution of the authority of the Great-Generals; and demanded at the ſame time what crime his father had committed ſince the Diet of Convocation, in which the prerogatives of his charge had been delivered to him, when they limited thoſe of the Crown. Theſe great debates were nevertheleſs ended by the eſtabliſhment of the commiſſion, in ſpite of the ſtedfaſt oppoſition of the Great-Generals, who the day after carried to the Acts of the Republic a manifeſto, which they would not receive there."

In *Sweden*, the Court is employed in notifying the Marriage of his Royal Highneſs Guſtavus, hereditary Prince of of Sweden with the Princeſs Sophia Margaretta, Daughter of the King of Denmark; and in meaſures to deteſt the author of the book, printed out of that kingdom, but in the Swediſh language, wounding the Majeſty of the King, and the Rights and Liberties of the State, and intending to overthrow the preſent Civil Eſtabliſhment. The Crown promiſes a reward of 10,000 crowns for diſcovering the author, with pardon for the accomplice that ſhall inform.

In *Denmark*, the intended Nuptials of his Royal Highneſs the Prince Royal of Demark and the Princeſs Carolina Matilda of England, were declared at the Court of Copenhagen, on the 18th of January with great ſolemnity and joy.

In *Holland*, the States have ordered a Faſt to be obſerved on the 13th of March.

In *Pruſſia*, his Pruſſian Majeſty has granted great privileges to the city of Drieſen near Landſberg on the Wartha, on account of its advantageous ſituation for trade with Portugal, and there are eſtabliſhed eight fairs for cattle, wool, and all ſorts of merchandize to be held here every year. And according to appearances, his Majeſty in the ſpring will have an army of 150,000 men ready to obſerve or act as he finds needful.

At *Vienna*. The Empreſs Queen, in teſtimony of her eſteem towards Baron de Jahnus, Commandant of the town and citadel of Hamburgh, has written to him the following letter, dated the 21ſt of November.

"THE

"THE Chevalier Dillon, Firſt Lieutenant in the regiment of Pretlach, being on the point of ſetting out for Hamburgh, I have thought proper to entruſt him with a letter, and to aſſure you of the ſentiments which I at all times entertain of you and your ſpouſe. It is a juſtice which I owe to you for the good ſervices you have rendered me; and to her, for the good qualities I have diſcovered in her perſon. May you both enjoy health for many years. I wiſh it from my heart, and repeat to you the aſſurances of my conſtant favour and good will. Signed,

MARIA THERESA."

There is alſo an account from the ſame place, That there has appeared a wild beaſt in Carinthia, ſuppoſed to be an Hyena, which had devoured a number of people in that dutchy, has been lately killed there. A Wolf of an enormous ſize, and which had likewiſe devoured ſeveral people, has alſo been killed in that province, at the very moment he was ſeizing a girl, by a huntſman, who had the dexterity to ſhoot that terrible animal in the flank, without touching the girl, whom the wolf had grievouſly wounded; but it was hoped, however, that ſhe would recover."

On the evening of the 22d of January, the King of the Romans was married.

A Duty is laid on hareſkins exported from the Province of Luxemberg.

France. By letters from this kingdom we are informed, that a commercial treaty of a very advantageous nature has lately been concluded with the Court of Madrid, wherein among other articles, France engages to furniſh the Spaniſh American provinces with 40,000 negroes from Africa, in a certain number of years; which naturally accounts for their late extraordinary ſolicitude to extend their ſettlements on the coaſt of Guinea.

By a regulation at Dunkirk, iſſued from the Court, all Engliſhmen who reſide in that fortreſs ſhall produce certificates from the places of their nativity, of their religion, their characters as to honeſty and morality, and the cauſe of their having left their own country, and why they came to ſettle there: all thoſe who cannot give a ſufficient teſtimony as above required, are to quit that place in a limited time. A moſt laudable example! which if imitated in this metropolis and in our own ports, might be a great ſtep towards preventing the many complaints of our natives againſt the ſhoals of French valets, frizeurs, &c:

The French miniſtry are not willing to pay more than 15milions of livres Tournois, for our maintenance of the French priſoners; which is 10 millions below our juſt demands; and it is confidently reported, that they are very aſſiduous in contriving meaſures for regaining their trade on the African coaſt; in which they are aſſiſted by the court of Spain. To ſettle an iſland near the Straits of Magellan; and to obtain from the Spaniards a ſettlement on the Eaſt ſide of the Iſthmus of Panama, commonly called the Neck and Throat of the Spaniſh Monarchy in the Weſt-Indies.

The French King is ſo diſpleaſed at the conduct of the Canton of Schwitz (one of the thirteen of Swiſſerland) that he has iſſued a declaration, bearing date the 19th of January, wherein his Majeſty declares, That he ſhall no longer reckon the ſaid Canton in the number of his near, antient, and faithful allies of the laudable Helvetic body; nor keep in his ſervice the troops of the ſaid Canton, either in the regiment of Swiſs guards, or in the other Swiſs regiments in his ſervice, ordering them to return home in the manner as ſhall be preſcribed to them: His Majeſty's pleaſure being, that all the hundred Swiſs of his guard, thoſe employed in the royal caſtles, houſes, gardens, &c. as all others of the Canton of Schwitz, ſhall quit the kingdom in the ſpace of a month after the publication of the preſent declaration; forbidding at the ſame time, all his ſubjects, of whatever rank or condition, from keeping or receiving the ſaid Swiſs of the Canton of Schwitz, in their ſervice or any otherwiſe, on pain of diſobedience, &c.

The following is a tranſlation of the French King's orders for delivering to the Spaniards all his poſſeſſions in North-America, which had not been ceded by the Definitive Treaty to Great Britain; from the original, printed by Denis Braud, Printer to the King at New

Orleans, in October laſt, and publiſhed amongſt all the French inhabitants.

Extract of the King's Letter to M. d'Abbadie, Director General and Commandant for his Majeſty in Louiſiana.

" *Monſ. D'Abbadie,*

" By a ſpecial Act, done at Fontainbleau, November 3, 1762, of my own will and meer motion, having ceded to my very dear and beſt beloved couſin the King of Spain, and to his ſucceſſors, in full property, purely and ſimply, and without any exceptions, the whole country known by the name of Louiſiana, together with New-Orleans, and the iſland in which the ſaid city is ſituated; and by another Act done at the Eſcurial, Nov. 13, in the ſame year, his Catholick Majeſty having accepted the ceſſion of the ſaid country of Louiſiana, and the city and iſland of New Orleans, agreeable to the copies of the ſaid Acts, which you will find hereunto annexed; I write you this letter to inform you, that my intention is, that on receipt of theſe preſents, whether they come to your hands by the officers of his Catholick Majeſty, or directly by ſuch French veſſels as may be charged with the ſame, you are to deliver up to the Governor, or Officer appointed for that purpoſe by the King of Spain, the ſaid country and colony of Louiſiana, and the poſts thereon depending, likewiſe the city and iſland of New Orleans, in ſuch ſtate and condition as they ſhall be found to be in on the day of the ſaid ceſſion, willing that in all time to come they ſhall belong to his Catholick Majeſty, to be governed and adminiſtered by his Governors and Officers, and as poſſeſſed by him in full property without any exceptions.

" At the ſame time, I hope for the proſperity and peace of the inhabitants of the colony of Louiſiana, and promiſe myſelf, from the friendſhip and affection of his Catholick Majeſty, that he will be pleaſed to give orders to his Governor and all other Officers employed in his ſervice in the ſaid colony, and in the city of New Orleans, that, the Eccleſiaſticks and Religious Houſes which have the care of the pariſhes and of the miſſions, may continue to exerciſe their functions, and enjoy the rights, privileges and immunities granted by their ſeveral Charters of Eſtabliſhment: That the Ordinary Judges do continue, together with the Superior Council, to adminiſter juſtice according to the laws, forms, and uſages of the colony: That the inhabitants be preſerved and maintained in their poſſeſſions: That they be confirmed in the property of their eſtates, according to the grants which have been made by the Governors and Directors of the colony, and that all the ſaid grants be holden and taken as confirmed by his Catholick Majeſty, even though not as yet confirmed by me.

" Hoping, above all, that his Catholick Majeſty will be pleaſed to beſtow on his new ſubjects of Louiſiana the ſame marks of protection and good will, which they enjoyed while under my dominion, and of which the misfortunes of war alone have prevented their experiencing greater effects. I command you to cauſe my preſent letter to be recorded in the ſuperior Council of New Orleans, to the end that the ſeveral eſtates of the Colony may be informed of its contents, and may have recourſe thereto when neceſſary. And the preſent being for no other purpoſes, I pray God, Monſ. D'Abbadie, to have you in his holy keeping."

Given at Verſailles, April 21, 1764.

Signed LOUIS.

In *Spain* the whole attention of that Court ſeems to be bent upon advancing the views and intereſt of France, agreeable to the family compact. They deny the French no favours either in regard to trade or territory: but are reſolved to cramp England in every circumſtance in their power; of which their contract with France for negroes, and their not paying the ranſom money for the Manilla's, are undoubted proofs.

Amongſt other improvements to the ſtrength of their Indian poſſeſſions, they have ſent a large quantity of military ſtores and ordnance to New Orleans in America; and ſeveral engineers to contrive means to make the mouth of the Miſſiſſippi navigable for ſhips of large burthen: and they have alſo ordered an augmentation of three companies of foot to reinforce Guan, one of the Marian Iſlands; and erected fortifications on the Iſland of Tinian, in the Pacific Ocean: and the bad countenance ſhewn to the Engliſh, has occaſioned a ſuſpicion along the coaſt of the Mediterranean, that

that the Spaniards are meditating a rupture; it being certain that they have invaded our ancient and peaceable allies on the Muſquito coaſt, and carried many of thoſe Indians into ſlavery.

The damages cauſed by the ſtorms and rains in the month of December, both in houſes, men, cattle and trees, are without number.

The ſtates of *Italy* afford very little novelty. The French troops in Corſica are not able to bring about any accommodation with the Genoeſe and the Malcontents, who are determined rather to die by the ſword, than ſubmit to any terms or treaty of the Republic of Genoa; but declare that they are ready to ſubmit to any other power, that will ſecure to them their religion and liberties.

The Pope has iſſued a bull in favour of the Jeſuits; and in ſuch anonimous terms againſt the Princes, who have expelled that order out of their dominions, as leaves room to think this pontifical act will create great diſguſt in thoſe Princes and States.

Portugal ſeems ſtill attentive to meaſures for preventing any ſurprize from her neighbour; by reforming her marine, augmenting her army, and ſtrengthening her frontiers. And his Moſt Faithful Majeſty ſeems to have given the *Coup de Grace* to the tribunal of *inquiſition*, by his edict forbidding any criminal proceſs before that Court, except the witneſſes be confronted to the party accuſed. To this ſalubrious law, his Majeſty intends to add the foundation of a College of Phyſicians at Liſbon.

The Sieur Bernardin da Coſta, Pay-maſter-General of the Arſenal, is arreſted and committed to the priſon of the Junquiere; ſuppoſed to be by order of the Chamber of Juſtice eſtabliſhed for the trial and puniſhment of thoſe who talk or act againſt the Government.

A negro, named Firmian da Coſta, having heard that his maſter was arreſted on the accuſation of having killed a ſoldier, left the wood where he had flown to for refuge, came of his own accord, and delivered himſelf into the hands of juſtice; declaring, that he alone was guilty of the murder, and that his maſter was innocent. After a mature examination; the maſter's innocence being fully proved, he was ſet at liberty, and the negro has been hanged."

ENGLAND only produces more variety of News than all the other dominions in Europe.—There has been purchaſed at Godmanchester, near Huntingdon, an oak table, and ſome oak boards, on which there grows an excreſcence reſembling human hair. And a nail extracted from one of thoſe pieces, had alſo a hair of a ſilver colour iſſuing from it.

By the annual nomination of Sheriffs, by his Majeſty in Council, on the firſt day of February, fell this year according to the following liſt:

Berkſhire, John Archer, of Welford.
Bedfordſhire, Rd. Edwards, of Arleſey.
Buckinghamſh. Wm. Backwell, of Caldecot.
Cumberland, Sam. Irton, of Irton.
Cheſhire, Hon. John Smith Barry.
Camb' and Hunt' Tho. Cockayne, of Soham.
Cornwall, Wm. Churchil, of Redruth.
Devonſhire, Paul Orchard, of Hartland.
Dorſetſhire, John Pinney, of Black Down.
Derbyſhire, Joſeph Greaves, of Aſton.
Eſſex, Wm. Mildmay, of Mouliham-Hall.
Glouceſterſhire, Rt. Dobbins Yate, of Bromſberrow.
Hertfordſhire, Bibye Lake, of St. Margaret's.
Herefordſhire, Wm. Vaſton, of Leominſter.
Kent, Sir Rd. Betenſon, of Bradborne, Bart.
Leiceſterſhire, Amb. Saunders, of Stoke Golding.
Lincolnſhire, Tho. Williamſon, of Allington.
Monmouthſhire, Sol. Jones, of Landilo Bertholey.
Northumberland, Mat. Forſter, of Bolton.
Northamptonſh. Jn. Harper, of Burton Lattimer.
Norfolk, Wm. Wigget Bulwer, of Wood Dalling.
Nottinghamſh. Wm. Ellis, of Thoroton.
Oxfordſhire, Arthur Anneſley, of Bletchingdon.
Rutlandſhire, Wm. Lawrence, of Preſton.
Shropſhire, John Topp, of Whitton.
Somerſetſhire, Peter Taylor, of Barcot.

Stafford-

Staffordshire, John Hodgetts, of Prestwood.
Suffolk, George Golding, of Thorington.
Southampton, Sir Edward Hulse, of Bremor, Bart.
Surry, John Hughes the Younger, of Banstead.
Sussex, Samuel Leeves, of Pulborough.
Warwickshire, Rt. Child, of Upton.
Worcestershire, Edw. Winwood, of Lindridge.
Wiltshire, Benj. Adamson, of Kemble.
Yorkshire, Sir Thomas Wenworth, of Bretton, Bart.

SOUTH WALES.

Brecon, Owen Evans, of Pennant.
Carmarthen, Wm. Rees, of Lanhharn.
Cardigan, Tho. Evans, of Blaengwenog.
Glamorgan, Calvert Jones, of Swansea.
Pembroke, John Francis Myrrick, of Bush.
Radnor, Sir Hans Fowler, of Abby Cromhire.

NORTH WALES.

Anglesey, Herbert Jones, of Llynon.
Carnarvon, Postponed.
Denbigh, Thomas Kyffin, of Mainon.
Flint, John Edwards, of Llanykesn.
Merioneth. John Pughe, of Garthmaelan.
Montgomery, John Ambler, of Buttington.

LENT Preachers appointed to preach before his Majesty, for the year 1765.

Feb. 20, Dean of the Chapel, Ld. Bp. of London.
22 Dean of Durham, Dr. Cowper.
24 Ld. Bp. of Litchfield.
27 Dr. Barrington.
Mar. 1. Dean of Wells, Dr. Creswick.
3 Ld. Bp. of Glocester.
6 Sir Rich. Wrotteſley.
8 Dean of Canterbury, Dr. Friend.
10 Ld. Bp. of St. David's.
13 Dr. Douglas.
15 Dean of Worceſter, Dr. Waugh.
17 Ld. Bp. of Peterborough.
20 Mr. Marriott.
22 Dean of Litchfield, Dr. Addenbrook.
24 Ld. Bp. of St. Aſaph.
27 Dr. Potter.
29 Dean of St. Aſaph, Dr. Herring.
31 Lord Archbiſhop of Canterbury, or Ld. Archbiſhop of York.
Apr. 3. Dr. Barnard.
5 Dean of Weſtminſter., Ld. Bp. of Rocheſter.
7 Lord Almoner.

Lent Preachers appointed to preach at his Majeſty's Chapel at Whitehall on Wedneſdays and Fridays, for the year 1705.

Feb 20. Aſh-Wedneſday, Dr. Moſs.
22 Friday, Mr. Wm. Dodd.
27 Wedneſday, Mr. Madan, (of York)
Mar. 1. Friday, Dr. Barton.
6 Wedneſday, Mr. Beadon.
8 Friday, Dr. Moore.
13 Wedneſday, Mr. Jacob.
15 Friday, Dr. Roſs.
20 Wedneſday, Mr. Barnard.
22 Friday, Mr. Watts.
27 Wedneſday, Mr. Worſley.
29 Friday, Dr. Markham.
Apr. 3. Wedneſday, Dr. Parker.
5 Good Friday, Dean of Peterborough, Dr. Tarrant.

On the 14th the Peruke makers preſented the following Petition to his Majeſty:

To the KING's Moſt Excellent MAJESTY.

The Petition of the Maſter Peruke Makers in the Cities of London and Weſtminſter, on behalf of themſelves and the reſt of their diſtreſſed Brethren of the Trade in Great Britain,

Moſt Humbly Sheweth,

"THAT your petitioners feel the utmoſt reluctance to prefer complaints to your Majeſty: but the great diſtreſſes which they already labour under, and the expectation, and even certainty, of the continual increaſe of them, unleſs timely averted, compels them to caſt themſelves at your Majeſty's feet, and humbly implore your Majeſty's gracious attention to their ſufferings.

That themſelves, and the ſeveral manufactories depending on them, ſuch as hair manufactures, ribbon-weavers, caul-makers, &c. do amount to ſuch a number, that they fear they ſhould not be credited if they were to give a modeſt eſtimate of it: for they conceive the thouſands thus employed, are little if at all inferior, to what can be boaſted by any one manufactory in your Majeſty's dominions.

That out of this number of your Majeſty's moſt loyal and dutiful ſubjects, there is a multitude already actually reduced to the want of the common neceſſaries of life, and that the whole body muſt ſeek ſubſiſtence in ſome different employ, at the riſque of periſhing miſerably

rably by a failure in the attempt, unleſs ſome means can be ſpeedily found out to ſupport their falling trade, fatally wounded by the preſent mode or faſhion which ſo generally prevails of men in almoſt all ſtations of life, wearing their own hair.

That this mode, pernicious enough in itſelf, is rendered exceſſively more ſo by ſwarms of French hair-dreſſers already in theſe cities, and daily encreaſing; who by artifice more than merit, as your petitioners humbly preſume, and by that facility with which your Majeſty's Britiſh ſubjects are too much inclined to prefer French ſkill and taſte in every article of dreſs (by which the moſt conſiderable manufactures in theſe kingdoms, as well as thoſe of your petitioners, do greatly ſuffer) find means to get employment to the privation of that pittance to your Majeſty's natural ſubjects, which the faſhion itſelf would ſtill leave in their power to obtain.

That by the preſent faſhion your petitioners are compelled to a breach of the command of God and man, and of courſe of diſobedience to your Majeſty's proclamation, wiſely intended for the benefit of all your Majeſty's ſubjects for the Lord's day deſigned for their inſtruction and confirmation in the principles of virtue and piety, is to ſuch of your petitioners as can yet find employment the day of all others, on which they are more hurried and confuſed; and a refuſal to comply with any order from their employers on that day, amounts to a reſolution of ſtarving at once. This is a hardſhip of ſo peculiar a nature, that your petitioners humbly conceive no conſiderable body of your Majeſty's ſubjects labour under it in any manner proportionably as they do. May they be permitted to ſay, that they tremble for themſelves and children, leaſt by this unavoidable abſence from the ſacred duties of that day, and the miſemployment of it entirely to worldly purſuits, they become as thoſe that know not God, while their fellow-ſubjects are happy in the ineſtimable bleſſing of attending and diſcharging their religious duties, and imbibing continually the precepts that teach to bear a conſcience void of offence, to fear God, and to honour the King.

Preſſed by the weight of theſe ſufferings, feeling their trade failing under them, ſenſible of the impending ruin of the ſeveral manufactories depending on them, beholding great and daily encreaſing numbers of their journeymen in a ſtarving and deſpairing condition; beholding alſo the ſubjects of France feeding on the only fragments they might hope to ſubſiſt on, and urged by every conſideration intereſting to human nature, your petitioners have at laſt ventured on an application to the only earthly power, able to ſave them from the torrent which is bearing them down to deſtruction, their hearts prompt them to believe that to know and to relieve the diſtreſſes of your ſubjects, is the ſame thing with your Majeſty; in which ſentiment they are fully confirmed by many royal acts ſince the commencement of your reign, and by none more than that which reſcued the poor from the ſcourge of the oppreſſors, by reducing the price of proviſions. Your petitioners feel this effect of royal paternal care, and gratefully bleſs the protecting hand.

Your petitioners therefore, with ſubmiſſive hope and dutiful reſignation, leave to your Majeſty's conſideration the merits of their petition; and whether your Majeſty's gracious condeſcenſion by example and countenance is not the only means whereby unimagined numbers can poſſibly be ſaved from the deepeſt miſery, humbly praying ſuch commiſeration and relief in their preſent deplorable condition as in your Majeſty ſhall ſeem meet;

And they ſhall ever pray."

On the 14th Mr. Jn. Williams, bookſeller, in Fleet-ſtreet, was brought, purſuant to his ſentence, from the King's Bench priſon, to ſtand in the Pillory in New Palace-yard, Weſtminſter, for re-publiſhing the North-Briton, No. 45, in volumes. It is remarkable, that the coach which carried him there, was No. 45. A few minutes after twelve he mounted, amidſt the repeated acclamations of upwards of ten thouſand people, who never ceaſed ſhouting till his hour of ſtanding was expired. Oppoſite to the Pillory were erected two Ladders with cords running from each other, on which were hung a Jack Boot, an Axe, and a Scotch Bonnet. The two latter, after remaining there ſome time, were burnt, and the Boot beheaded

ed. During his ſtanding alſo, a purple purſe, very richly ornamented with ribbons of an orange colour, was produced by a Gentleman noted for his Patriotiſm, who began a collection in favour of the culprit, by putting a guinea into it himſelf; after which the purſe being carried round, every body contributed according to his own fancy, to the amount in the whole, as ſuppoſed, of upwards of 200 guineas: One Gentleman, it is ſaid, gave 50 guineas. Mr. Williams, at going into the Pillory and getting out, politely bowed to the ſpectators, He held a noſegay in his hand all the time.

On the 25th the Rt hon. Lord Biron who had ſurrendered, was committed to the Tower, till a time is fixt for his trial.

BIRTHS.

A Son to the Marquis of Kildare.—A daughter to Sir Simon Stuart, Baronet.

MARRIAGES.

MR. Geo. Handford, Grocer, to Miſs Cockſhut.—Right Hon. the E. of Shelburne, to L. Sophia Carteret.—Rev. Mr. Landland of Wem, to Miſs Ann Henſhaw.—Dr. Hall, of Newcaſtle, to Miſs Patty Hick.—John Lewis, Eſq; of London, to Miſs Mico.—Mr. Owen Davis, to Miſs Sally Gladman.—Mr. Key, of Newgate ſtreet, to Miſs Garrat.—Charles Palmer, Eſq; to Miſs Frances Vane.—John Will. Auſting Eſq; to Miſs Malters.—Saville Finch, Eſq; to Miſs Fullerton.—Ebenezer Gallus, aged 80, to Miſs Kitty Lloyd, not quite 20.—Samuel Dicken, of Market Drayton, to Mrs. Chaloner, of Stoke Park.—Rev. Mr. King, to Miſs Ann Magdalen Combrune.

PREFERMENTS.

BRASS Croſby, Eſq; to be Ald. of Bread ſtreet Ward.—Will. Mildmay, of Moulſham, to be a Baronet.—Henry Raper, Eſq; Ld. Mayor of York.—Rev. Chriſtopher Hatton Walker, to the Rectory of Harrington, county of Northampton.—Rich. Peers, Eſq; Ald. of Queenhithe Ward.—William Markham, LL. D. Dean of Rocheſter.—Rev Nevil Maskelyne, aſtronomical obſervator at Greenwich. Mr. Bliſs deceaſed.

DEATHS.

THO. Salvin, of Eaſingwold, Eſq;—Mrs. Diana Cooke, ſiſter of Sir Brian Cooke.—Mr. William Baker, of York City.—Daniel Mapletoft, Eſq; at Camberwell.—Joſhua Travers, Eſq; of Kennington lane.—Mr. Woolſtonecraft, in Shoreditch.—Jer. Harrington, Eſq; at Camberwell.—Edw. Weſton, Eſq; at Worceſter.—Rev. Mr. Griffith Williams, R. of Little Tey, Eſſex.—Rev. Mr. Gregory, R. of St. Tudy, Cornwall.—Lady Louiſa Fitzgerald, youngeſt D. to the E. of Kildare.—Walter Berry, Eſq; at Shadwell.—John Nicholſon, Eſq; Stanhope ſtreet.—Francis Webberley, Eſq; Captain of foot.—Hon. and Rev. Edw. Townſend, D. D. Dean of Norwich.—Tho. Yate, Eſq; in New Bond-ſtreet.—Rev. Tho. Vernon, R. of Mantley.—Mr. Sloper, near Redburn.—Peter Dent, Eſq;—Frederick St. Paul, Riding-maſter.—Rev. Mr. Harriſon, R. of Bloomſbury.—Leake Oakeover, Eſq;—Humphry Coatſworth, Eſq;—Sir Gerard Napier, Bart.—Alderman Dickenſon, of London.—Alderman Hewiſh, of Leiceſter.—Hon. Wm Richard Chetwynd, Member for Stafford.

Liſt of NEW BOOKS and PAMPHLETS.

AN Eſſay on Grammar, as it may be applied to the Engliſh Language, by William Ward.

The Laws and Policy of England, relating to Trade, examined by the Maxims and Principles of Trade in general, and by the Laws and Policies of other Nations, 3s.

A Defence of F. Giardini from the Calumnies, Falſehoods, and Miſrepreſentations of Cacophron, 1s.

Memoirs of a Coquet, 3s.

A ſecond Letter to the Right Hon. Charles Townſhend, occaſioned by his Commendations of the Budget, 1s.

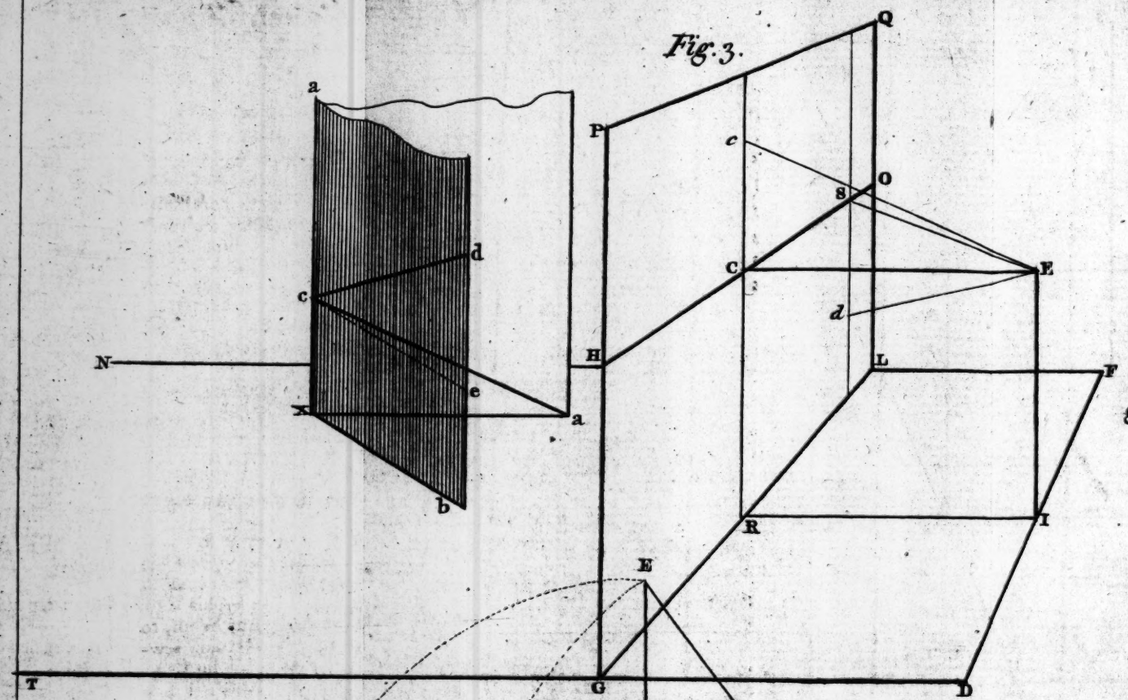
An Authentic Narrative of ſome remarkable and intereſting Particular in the Life of communicated, in a Series of Letters, to the Rev. Mr. Haweis, 2s.

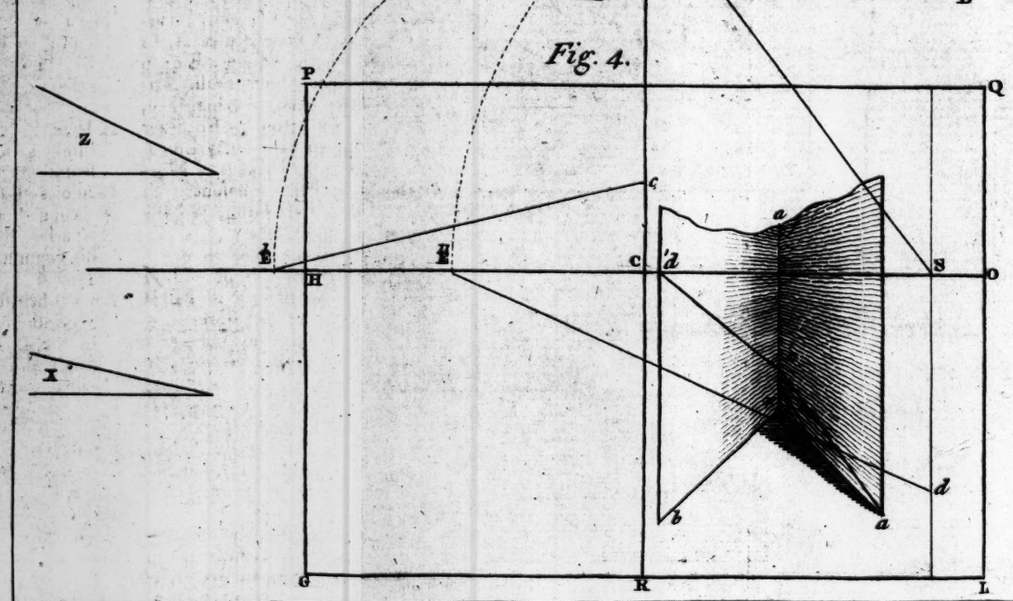
Mumbo Chumbo, a Tale, written in ancient Manner, 1s.

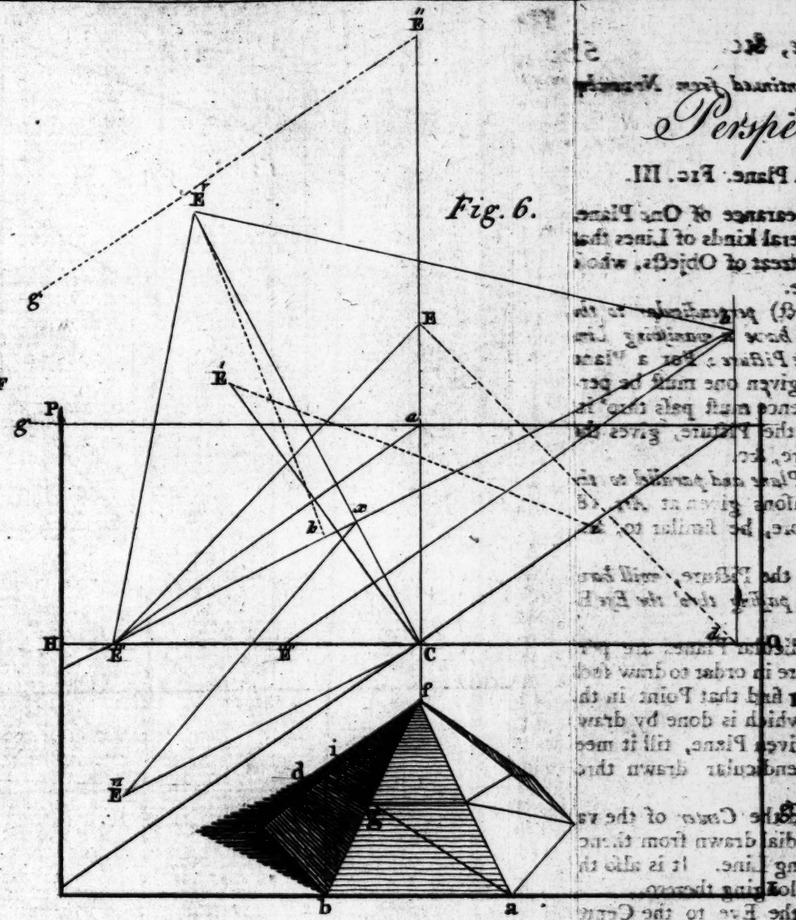
Conſideration on the Policy of Entails in Great Britain, by John Dalrymple, Eſq; 1s. 6d.

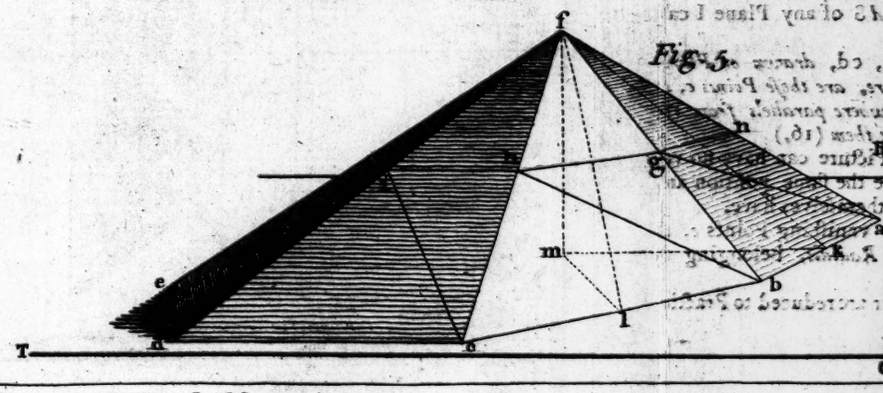
A Treatiſe on Domeſtic Pigeons, 2s. 6d.

A Narrative of the Proceedings relative to the Diſcovery of the Longitude at Sea, by Mr. John Harriſon's Timekeeper, 6d.









For the General Magazine.

The THEORY *of* PERSPECTIVE, &c. *continued from November Magazine, Page* 526.

CHAP III.

Of Planes *perpendicular to the* Ground Plane. FIG. III.

WE have already conſidered the Appearance of One Plane, viz. the Ground One, with the ſeveral kinds of Lines that may be drawn upon it; we now proceed to treat of Objects, whoſe ſides are perpendicular to the Ground Plane.

ART. 28. *A Plane* a a (or ſide of an Object) *perpendicular to the Ground Plane, and alſo to the Picture, will have a vaniſhing Line* R c, *which will paſs thro' the Center* C *of the Picture:* For a Plane paſſing thro' the Eye E and parallel to the given one muſt be perpendicular to the Picture, and of Conſequence muſt paſs thro' its Center; but this Plane's interſection with the Picture, gives the vaniſhing Line required. (Art. 12) therefore, &c.

29. *A Plane perpendicular to the Ground Plane and parallel to the Picture, can have no vaniſhing Line,* for reaſons given at *Art.* 18. The Perſpective of this Plane will, therefore, be ſimilar to, and every way like its original.

30. *An oblique Plane,* a b, with regard to the Picture, *will have a vaniſhing Line* S *d, where the Plane d* E S, *paſſing thro' the Eye* E, *parallel to* a b *ſhall interſect the Picture* (12.)

31. As the vaniſhing Lines of all perpendicular Planes are perpendicular to the Horizontal Line; therefore in order to draw ſuch Lines, nothing is further required, than to find that Point in the Horizontal Line where they interſect it; which is done by drawing a Line from the Eye parallel to the given Plane, till it meet the Horizontal one; an indefinite perpendicular drawn thro' that Point, is the required vaniſhing Line.

32. The Point thus found (31) is called the *Center* of the vaniſhing Line paſſing thro' it; becauſe a Radial drawn from thence to the Eye is perpendicular to that vaniſhing Line. It is alſo the vaniſhing point of the Baſe of the Plane belonging thereto.

33. The Ray E C or E S drawn from the Eye to the Center (32) C or S of the vaniſhing Line *c* R or *d* S of any Plane I call the *central Ray* belonging that Plane.

34. *The vaniſhing Points of any Lines* a c, c d, *drawn on Planes* a a, b a, *perpendicular or oblique to the Picture, are thoſe Points c, d, in their reſpective vaniſhing Lines* c R, S *d, where parallels from the Eye, as* E *c,* E *d, to the given Lines* a a, a b *cut them* (16.)

35. Lines upon a Plane parallel to the Picture can have no vaniſhing Points; but their Images will have the ſame poſition and relation one to another as the object Lines themſelves have.

36. The Lines E *c,* E *d,* which give the vaniſhing Points *c, d,* of Lines a c, c d, I denominate *vaniſhing Radials,* belonging to their reſpective Lines.

The Propoſitions delivered in this Chapter are reduced to Practice in the following Manner:

The Planes being prepared as before (22), Let GLPQ (vide Fig. 4) be the Picture C its Center, and E the ſeat of the Eye.

37. The vaniſhing Line of the perpendicular Plane a a (Fig. 3.) paſſing thro' C the Center of the Picture (28); draw the Line R r (Fig. 4) for it.

38. In order to find the vaniſhing Line of the oblique Plane b a (Fig. 3.) from the Eye E (Fig. 4.) draw E s, making the angle C E s equal the Angle a a b (fig. 3.) the Inclination of the Plane, and thro' the point s, where it meets the Horizontal Line, draw the indefinite Perpendicular s *d* for the vaniſhing Line required (31.)

39. In the next place we are to ſhew how vaniſhing Points for Lines drawn on theſe Planes are found; for the eaſier comprehending of which it will be neceſſary to make theſe preparations. In Fig. 3. Let the Planes C E *c*, S E *d*, revolve upon the Axes C *c*, S *d*, 'till the Lines C E, S E, coincide with the horizontal one. From hence it naturally follows, that we muſt (in Fig. 4.) firſt from C ſet off the diſtance E C on the Horizontal Line to E', and 2dly, from S, the diſtance s E, to E": This done, let the angles X and Z be reſpectively equal to the angles a a c, c c d (Fig. 3.) the inclination of the Lines a c, c d to the Baſe of the Planes; then drawing E' *c*, E" *d*, cutting the vaniſhing Lines R r, s *d*, in *c* and *d*, and making the Angles *c* E' C, *d* E" s equal X and Z reſpectively; *c* and *d* will be the vaniſhing Points of the Lines a c and c d in Fig. 3.

40. By the help of theſe vaniſhing Lines and Points, the Perſpective of the object a a b (Fig. 3.) is eaſily drawn. Thus, find the points *a* and *b* (Fig. 4.) the perſpective of a and b (fig. 3.) by Chap. 2. then by the Centers C and S, draw the Lines *a x* and *b x* the Image of the Baſe of the two Planes; on the points *a*, *a*, *b*, erect perpendiculars, the given height of the Planes; laſtly, by the Points *c* and *d* draw *d e* and *c e* for the perſpective of the Lines a c and c d (fig. 3.)

[*To be continued.*]

The MAID OF THE MILL, *a New* COMIC OPERA.

THIS Piece has been received with great pleaſure by the Town, who are affected by this new Comic Opera, much with the ſame degree, as they were charmed with *Love in a Village*, wrote by the ſame Author.

The Fable or general ſubject of this Theatrical piece, we are informed, by the Preface, is drawn from the much admired Romance of Pamela. From which the Author has adopted almoſt every circumſtance.

The Drama of this Opera is conducted under the names of Lord Aimworth, Sir Harry Sycamore, Mr. Mervin, Fairfield a Millar, Giles a Farmer, Ralph ſon of Fairfield, Lady Sycamore, Fanny a Gipſy, Theodoſia, Sir Harry's daughter, and Patty, the Miller's daughter.

Patty the daughter of the Miller Fairfield, a reputable Farmer alſo, and tenant to Lord Aimworth, having been brought up and educated

educated from her infancy in the houſe, and under the care of his Lordſhip's mother, who bred her up with the greateſt tenderneſs, till come to the years of maturity, and gave her every embelliſhment of education ſuitable to one in the higheſt rank of life; ſhe made ſo good uſe of theſe advantages, that contrary to the common run of the lowly born, who happily meet with ſo fortunate a patronage, her humility increaſed in proportion, as ſhe improved in her education; and every new obligation which ſhe received, inſtead of exciting the leaſt degree of vanity, inſpired her with a laudable ambition of deſerving the next. And the charms of her perſon, the exquiſite turn of her mind, joined with her liberal education, rendered her perfectly amiable.

But when the eyes of all were fixed upon this young woman, and ſome had gone ſo far in their conjectures, as to ſuppoſe her deſigned for a wife to Lord Aimworth, by the old Lady, her patroneſs, and others obſerving the regard with which that young Lord always diſtinguiſhed her, were very open in their prophetic declarations; that Patty was either to be the wife, or was the concubine of Lord Aimworth.

In the mean time, though Patty maintained the eſteem of all, and kept a ſtrict guard upon her virtue; the obliging behaviour of the young nobleman, enlivened with a perſon and temper, which bore the ſtrongeſt correſpondence to her own, made a deep impreſſion on the heart of this Miller's daughter; yet as her good ſenſe painted the prodigious diſparity of their ſituations in the moſt ſtriking light, and ſhewed the almoſt abſolute impoſſibility of a union by marriage ever to take place: So her virtue and her gratitude forbid her ever to think of conſulting any illiberal inclination, or to dream of deluding the ſon of her benefactreſs into a match that might excite the reſentment of the whole family.

Actuated by theſe ſentiments, Patty had prudence enough to conceal her diſquiet; tho' the young Nobleman, who entertained the warmeſt prejudice in her favour, furniſhed her with repeated opportunities of diſcloſing her mind, by the moſt cordial declarations of tenderneſs and eſteem.

In this ſituation ſtood Patty, when my Lord Aimworth ſet out on his travels: And the ſudden death of her Patroneſs, the Lord's mother, haſtened his return, who was taken off ſo unexpectedly, that ſhe had not even time to make that proviſion for Patty, which ſhe had often promiſed, to ſettle her handſome in the world, and agreeable to the education given her.

Lord Aimworth at his return home, had it now in his power to make himſelf happy in his affections. But tho' Patty had wakened a love in his heart, yet the fear of the world's cenſure kept him from offering terms of marriage to this amiable creature, and his own innate honour, prevented his making any attempts injurious to her virtue.

In this dilemma, his Lordſhip fearful of himſelf, thought it moſt prudent to permit Patty to return home to her father, and to liſten to ſome overtures of a match with Theodoſia, daughter of

Sir Harry Sycamore, an old good-natured Baronet, continually wheedled and governed by his Lady, who was paſſionately fond of rank, and reſolved to force her daughter to deſert Mervin, to whom ſhe had given her promiſe.

Patty was no ſooner come home to her father's houſe, than ſhe met with a warm ſuitor in neighbour Giles, a young Farmer of ſubſtance, and much approved of, and recommended by Fairfield to his daughter in a moſt ſenſible and rational manner.—"I have, "ſays the father to Patty, ſomething to ſay to thee, which I would "have thee to conſider ſeriouſly.—I believe I need not tell thee, "my child, that a young maiden after ſhe is marriageable, eſpeci- "ally if ſhe has any thing about her to draw people's notice, is "liable to ill tongues, [intimating the inſinuations of a criminal "commerce between Lord Aimworth and her] and a many croſs "accidents; ſo that the ſooner ſhe is out of the way, the better. "Patty underſtands her father, and replied; Undoubtedly, fa- "ther, there are people enough, which take every opportunity to "gratify their own malice: But when a young woman's conduct "is unblameable—"

Fairfield. Why, Patty, there may be ſomething in that, [I allow there are malicious people, and that you deſerve no blame] bu you know "ſlander will leave ſpots where malice finds none: I "ſay then, a young woman's beſt ſafeguard is a good huſband." Then he recommended Giles; and having told her, that he would be glad to have him for a ſon-in-law; Patty, tho' ſhe was influenced by no motive of love, aſſented to this propoſal immediately, from a principle of duty: and tho' ſhe had been brought up with higher notions and expectations, and could not be ignorant of the love and tenderneſs with which ſhe was always treated by Lord Aimworth; Patty replied, "I have told you often, father, I "would ſubmit myſelf entirely to your direction: Whatever you "think proper for me, is ſo."

While this was in agitation, Lord Aimworth comes down, with Sir Harry and his Lady, and their daughter, Theodoſia. A journey promoted by Lady Sycamore, in order to bring about a marriage between the young Lord and her daughter. Giles was ſomewhat confounded at this news; and when old Fairfield inſiſted upon his going to Lord Aimworth, and informing his Lordſhip of his intentions to marry Miſs Patty; he could not forbear obſerving, "That folks did not ſpare to ſay, that my Lord had a kind "of ſneaking kindneſs for her himſelf: And I remember at one "time, ſaid he, it was riſe all about the neighbourhood, that ſhe was "actually to be our Lady." However, Giles propoſed to go to my Lord immediately, deſiring no more but in the way to chat a little with Miſs Patty. But Miſs Patty had locked herſelf in, and would not hear, upon which Giles is introduced ſinging this air:

Hark! 'tis I your own true Lover,
After walking three long miles;
One kind look at leaſt, diſcover,
Come and ſpeak a word to Giles.

You

You alone my heart I fix on:
Ah you little cunning vixen!
I can ſee your roguiſh ſmiles.

Giles being gone up to my Lord without communicating his errand to Patty, her father informs her of it.—"I have ſent, ſays "he, the farmer to let his Lordſhip know that he is willing and "we are willing, and with his Lordſhip's approbation."—Here Patty was ſenſibly ſtruck with a proceeding, that muſt either conſign her irrevocably to the embraces of a clown, or diſcover the paſſion which Lord Aimworth had for her.—"Surely, ſaid ſhe, "you have not done this raſh, this precipitate thing—Oh! you "have diſtreſſed me beyond imagination—Why would ye not "give me notice, ſpeak to me firſt?" Her father chides; Patty begs his pardon and ſubmits; and then Fairfield tells her, "Quiet "thyſelf, Patty, and thou'll ſee all this will turn out for the beſt." However, Patty's breaſt was not ſo ſoon compoſed, and is introduced alone with this ſoliloquy.—"What will become of me? "My Lord will certainly imagine this is done with my conſent. "Well, is he not himſelf going to be married to a Lady ſuitable "to himſelf in rank, ſuitable to him in fortune, as this farmer is "to me. And under what pretence can I refuſe the huſband my "father has found for me? Shall I ſay that I have dared to raiſe "my inclinations above my condition. And preſumed to love, "where my duty taught me only gratitude and reſpect? Alas! "who could live in the houſe with Lord Aimworth, ſee him, "converſe with him, and not love him? I have this conſolation "however, my folly is yet undiſcovered to any: Elſe how ſhould I "be ridiculed and deſpiſed. Nay, would not my Lord himſelf "deſpiſe me, eſpecially if he knew that I have more than once "conſtrued his natural affability and politeneſs into ſentiments "as unworthy of him, as mine are bold and extravagant. Unexampled vanity! did I poſſeſs any thing capable of attracting "ſuch a notice, to what purpoſe could a man of his diſtinction "call his eyes on a girl, poor, meanly born, and indebted for e"very thing to the ill-placed bounty of his family." And concludes with the following air:

Ah! why ſhould fate, purſuing
A wretched thing like me,
Heap ruin thus on ruin,
And add to miſery?
The griefs I languiſh'd under,
In ſecret let me ſhare;
But this new ſtroke of thunder,
Is more than I can bear.

The ſcene then opens with a converſation between Sir Harry, Lady Sycamore, and Theodoſia, in which Theodoſia declared her diſlike to the match propoſed to her with Lord Aimworth, and

and while she is arguing the point with her father and mother, who express their dissatisfaction with her aversion in very high words, Lord Aimworth enters, and is immediately followed by Giles, who addresses his Lordship with much simplicity, for his leave to marry Patty Fairfield.

Now it was that Lord Aimworth found how dear this innocent girl was to his heart, the thought of her approaching marriage awakened a tenderness more sensible than what he had ever felt before. And not being able to find, by the simple narrative of Giles, by whose particular desire he was sent on this errand; The fear that Patty was really inclined to marry the farmer, kindled an instant jealousy, which at once embarrassed, afflicted, and made him ashamed. His Lordship, nevertheless, shewed no aversion to the match, but could not help sending him away with some kind of an obstacle.—"Are you not afraid, says my Lord to Giles, "That her education has rendered her a little unsuitable for a "wife for you?" And he the whole time appeared in such confusion, that Sir Harry could not forbear rallying his Lordship upon his consent for the marriage of his mother's housekeeper.

Lord Aimworth alone, breaks out into this expostulation. "This worthy Baronet and his Lady are certainly a very whimsical "couple, however, their daughter is perfectly amiable in every "respect: And yet I am sorry I have brought her down here: "For, can I in honour marry her, while my affections are en-"gaged to another? To what does the pride of condition and the "censure of the world force me! Must I then renounce the only "person that can make me happy: Because, because what? Be-"cause she is a Miller's daughter? Vain pride and unjust censure. "Has she not all the graces, that education can give her sex, im-"proved by a genius seldom found amongst the highest? Has she "not modesty, sweetness of temper, and beauty of person, capa-"ble of adorning a rank the most exalted? But it is too late to "think of these things now: My hand is promised, my honour "engaged: And if it was not so, she has engaged herself; the "farmer is a person to her mind, and I have authorized their "union by my approbation."

Giles returned to Fairfield with joy and triumph, and Patty was obliged by her father, to dress herself becoming a Miller's daughter, and to go and thank my Lord for his consent; she obeys: But this interview with his Lordship, only served to disclose his Lordship's more than friendly regard for her, and to convince him of the greatness of her love for him. And tho' matters did not yet maturate to bring on a close representation of their minds; his Lordship could not help expressing a thorough dislike to Giles, by threatening to turn him out of his farm. This immediately roused Patty's good sense and all the sensibility of her soul. She saw she was beloved; and from that moment resolved rather to sacrifice herself to a hopeless tenderness for his Lordship, than ever think of marrying another man. But the following incidents made

way

way both for her and his Lordſhip to rid themſelves of their engagements.

His Lordſhip out of a mere act of generoſity, ſoon after preſented Old Fairfield with 1000l. to portion of his daughter Patty. This being rumoured about as a convincing proof of his Lordſhip's too great fondneſs for Patty; was ſo improved by malicious tongues, that Giles flew off from his promiſe, with a jealouſy that his Lordſhip would make him a cuckold. On the other hand, Miſs Theodoſia was deluded by the means of a gypſy to run away with Mr. Mervin her former ſweetheart, which brought on the match again between the two lovers, with Lord Ainworth's approbation.

Thus his Lordſhip being diſengaged from Theodoſia with honour, and convinced that the opinion of individuals was not to be ſet in competition with the ſelf-approving conſciouſneſs of his own mind; gave himſelf to Patty, and provided handſomely for all her relations, and they conclude this joyful ſcene with the following air:

L. Aim. My life, my joy, my bleſſing,
In thee each grace poſſeſſing,
All muſt my choice approve,
Patty. To you my all is owing,
O take a heart o'erflowing
With gratitude and love,
L. Aim. Thus infolding,
Patty. Thus beholding,
One to my ſoul ſo dear.
Both, Can there be pleaſure greater,
Can there be bliſs compleater,
'Tis too much to bear.

OBSERVATIONS *on* TRAVELLING.

IT is a grand miſtake in Education, to let our Children undertake Travels for frivolous ends, or from too narrow conſiderations. The Merchant thinks of nothing but his profit. The Antiquarian recommends nothing to his ſon, but a ſtrict ſearch after medals and uncommon monuments. The lover of polite arts, places the young traveller under a tutor or deſigner, who will never ſpeak to his charge, during their whole tour, but of the Titian or the Georgian, and of the compariſon between the ſchools of divers countries in Europe. And it may be, that a father not quite ſo learned and worldly as theſe, may be content to enable his ſon by his travels, to pay his ſhare of the converſation, by relating his pleaſure at the ſound of the chime of bells at Antwerp, and his admiration of the Clock at Stratſburg, his account of the Tower of Piſa, the Caſcade of Tivoli, the Dogs Grotto, the mouth of Mount Veſuvius, and of the Venetial Carnaval.

Theſe

Theſe are too contracted motives for a young gentleman's travels, who may in time be entruſted with the management of ſome enterpriſe of great moment, who may be a Magiſtrate, a Governor of ſome Colony, or be called to ſome eminent poſt in the State.

He ought to travel, that has any ſuch views or pretenſion; but he muſt do it like a man, and not like a ſchool-boy: Not with a governor, but with a friend, on whoſe judgment, zeal and knowledge, he can entirely depend. And even then his travels will be uſeful to him only in proportion to the proviſion he has made in experience and curioſity.

It is obſerved, that moſt travellers in the grand Tour, content themſelves with letters of recommendation, to procure them an eaſy acceſs and favourable reception every where. Recommendatory letters are very neceſſary. To this they add an exact liſt of the Roads and Inns, and directions for their travelling expences, and for defending them againſt the injuries of heat and cold; and take every other prudent precaution to render their journey agreeable. But when they have done all, there is a previous caution of infinitely greater moment. The young traveller muſt be fortified with a principle, that may ſhield his religion againſt all temptations, arguments, and miſrepreſentations. And the maxim which is to be his bulwark and guide, is contained in theſe ſimple and eaſy words, viz "The Chriſtian Religion can neither be "ſettled nor learned by diſputes or metaphyſical reaſonings; but "only by an ancient revelation made to mankind, and by a miſ-"ſion of witneſſes, who never ceaſed from age to age to hand "down to us what they had learned and received from their pre-"deceſſors, agreeing all in one faith, tho' perhaps differing ſome-"times in form of church government."

This principle well eſtabliſhed, will ſhelter every traveller from the ſophiſms of proud conceited Philoſophers, who, notwithſtanding the inſufficiency of human reaſon in natural things, pretend to make it the judge of what man is to believe and hope. And the ſame principle will alſo guard him from another danger; for by ruling both his conduct and belief, he, at once, guards againſt bad examples, and is not influenced by a conſideration of the faults of the witneſſes or miniſters themſelves.

He that is provided with this principle, requires no further help than the New Teſtament, to preſerve ſentiments that may render his joy perpetual and equal to the purity of his manners. But at the ſame time that he himſelf is rendered proof againſt all the attacks of a dark reaſon, he muſt be poſſeſſed of an invincible mildneſs and moderation towards thoſe, who have not his way of thinking. He muſt not hate thoſe who diſſent from him. The ſpirit of charity is the ſoul of chriſtianity. And this ſpirit which ſuppreſſes all animoſity in true chriſtians, makes them the moſt lovely part of ſociety. And as the chief motives for travelling are to render a perſon more ſociable and more completely verſed in the things he knew already, he had much better ſtay at home, than not attain theſe two ends by his travelling. Whatever

Whatever advantages ſhall be propoſed from travelling, the firſt benefit expected, is to become perfectly ſociable. Chriſtian charity is the very ground-work on which is ſown the ſeed of this amiable quality, to be perfected and brought to maturity by travelling. He that ſhews his deſire to contribute to the real good of ſociety, is generally loved by all. If he is zealous in promoting the good of mankind, he gains their reſpect and confidence. However, there is ſomething in nature ſo ſtubborn, that we often ſee a man poſſeſſed of a great ſtock of love for mankind in general; yet is ſo unſettled in his diſpoſition, that his ways ſhall be blunt and inconſiderate, and at times he ſhall be affected with airs of unconcern and diſtraction.

Travelling is the beſt corrector of ſuch a temper. It is the firſt merit of travels, to eradicate all roughneſs, and to ſuppreſs even the leaſt ſhadow of pride. There is no ſmoother file, than a long uſe of all ſorts of characters: He that paſſes from town to town, nation and nation, is obliged to reſolve, to anſwer and to conduct himſelf, ſo as to tally with the exigencies of circumſtances. He takes notice of what is liked, and of what may pleaſe. And in courſe muſt bid adieu to all words and manners, that he finds either offenſive or tireſome.

Beſides the qualities which render a man truly ſociable, we find a traveller that makes a proper uſe of his time, and parts endowed, more than other men, with ſolid learning, merely becauſe they want practice and experience. Yet advantages of this ſort are not to be reaped by a traveller, who is yet no more than a child. None but a full grown man is capable of ſeeing or making his advantage of what comes under his inſpection; aſſiſted by a ſufficient knowledge of the civil and natural hiſtory of thoſe countries he intends to viſit. By this means he may furniſh himſelf with an exact pocket-book of ſuch particular circumſtances from hiſtory, as will enrich his memory with perſons, times, and events; and deſcend ſo low as to particularize their exerciſes, habits, and ornaments of every country: And attain to a thorough knowledge of their manuſcripts, coins, ſtatues, paintings, and all their monuments, ſo that every thing that he finds within the compaſs of his reading ſtrikes him at firſt ſight, when brought into preſence. And he is able to point out to every inhabitant of the places he viſits, monuments which they themſelves knew not. Thus Tully is recorded to have ſhewn the inhabitants of Syracuſe, the tomb of Archimedes their fellow-citizen.

Natural Hiſtory will ſtill lead the traveller further in his reſearches, and ſupply him with a vaſt reſource to ſociety, in point of ſciences and government. A young man, that has orderly ranged in his head, the things which human induſtry faſhions and cultivates, together with the fineſt attempts it has made to facilitate the ſeveral uſes of them, cannot travel without looking with equal eagerneſs and proſit upon things, which others do not even dream of looking at. Every thing fixes his attention, and gives him pleaſure; whilſt others can enjoy nothing. He admires the

simplicity of a machine; again he is delighted with the multiplication of a sum, which otherwise would be twice or thrice less. All the branches of his knowledge increase and gather, as it were, as he advances.

No efforts or excursions are necessary to make a priggish fop or a voluptuous man. Every native soil is but too well provided with matter to turn his brains or corrupt his heart. But to be amiable and useful to mankind, a man must have seen much, and after the best manner. Experience alone intitles us to bring down the promises and self sufficiency of a certain set of Genii, who fancy they can find every thing in their closet, or by the acquisition of a few mathematical truths, and who imagine that their projects will not meet with more opposition in society, or in nature, than the lines of their Geometry on paper.

A traveller having thus acquired an excellent head, it is no matter to him whether he is consulted by his family, his country, or his sovereign. His chief satisfaction consists in procuring the common good, rather than his own greatness. Centering all our views in self, so as never to take any share in an enterprize or affair, but in proportion as it shall favour our private interest, has always something mean in it unbecoming a gentleman, and destroys that good opinion and confidence of the public, which is necessary to gain the reputation of an intelligent and honest man.

REFLECTIONS *on the* State *and* Condition *of* NOBLEMEN *and* TRADESMEN.

NOTHING was more wisely established, than the bounds which seperate noblemen from the persons in subordinate classes. This precaution maintains in the gentleman the sentiments, that will hinder him from derogating, and fires the rich citizen with emulation, capable of raising him to the noblest attempts.

It is with justice that the transition from one of these conditions to the other, has been rendered difficult. The man who is willing to force that barrier, and attain a higher rank, must give proofs of either an uncommon bravery, or of such extensive parts, as will make him the man of the republic. On the other hand, the gentleman who would sooner give over his prerogatives, to rush into the crowd, and apply to the manual operations of the common class of men, is deterred from it, by the fear of degrading his birth, and bringing reproaches upon himself. Their respective difficulties keep them both in their actual condition, and thereby provide the public with useful men in all the stages of society.

But a certain French author in good esteem, says, There is one point in which the condition of the tradesman is more agreeable than the gentleman's. The tradesman, who knows the way to glory and titles, may very justly, and without any controul, forbear engaging in it. Nay, he is even blamed for keeping within the bounds of the most indifferent condition. His diligence in

in buſineſs to multiply his profits, is the greateſt encomium that can be made of it. It is not the ſame thing with the gentleman of noble extraction. It is not even enough not to degrade himſelf by manual employment, or by works which all the world are capable of; he muſt diſtinguiſh and bear himſelf up by that very activity, which has been the principle of his nobility. But it often happens too, that he knows not ſufficiently the methods that will extricate him out of his ſtate of inutility, and ſave him from that ſtate of oblivion, which is the ordinary puniſhment annext to an idle inactive uſeleſs life. Being ſeduced by frivolous diſcourſes from his infancy, he's perſuaded that he is fit for nothing but to bear arms, or to engage in ſome military ſervice. Whence it frequently happens, that the end of a war, or his own diſguſt for the ſervice, throw him and his family into the moſt deplorable obſcurity.

There are numberleſs inſtances of this in families, formerly very eminent, eſpecially where the equal ſharing of patrimonies cuts the fineſt eſtates into ſo many portions, that after a few generations and new ſubdiviſions, they preſently dwindle into nothing. A gentleman in that caſe ought to dread a military ſervice above all things; becauſe it is a ſure means to complete his ruin.

How many families, continues he, have been thus undone, and loſt to the ſtate! They entertain a confuſed unreflected notion, that the ſtate is able and obliged to ſecure funds for, and to make proviſion for gentlemen in ſtraits. They murmur: They accuſe the preſent age, the court, the miniſter with ingratitude; and don't ſpare even royalty itſelf. But they talk perfect nonſenſe. But commerce and induſtry would ſupply them with a thouſand means of promoting their children, and even of reſtoring their families to their former ſplendor and luſtre.

It is allowed, that being born a gentleman, is to be born to command, and to be at the head of both men and great enterprizes. But what ſort of government will that man dare to take upon him, who leaves in diſorder that, by which he muſt provide for his family? No order: No brains.

Pleaſures, amuſements, and idleneſs, may, among a certain ſet of people, aſſume an outſide of nobility. But men, who are as good citizens, as they are truly noble, have a very different way of thinking. The habit of doing nothing, has no other efficacy, but that of adulterating our ſentiments; and the ſtate is no leſs grateful for the ſervice of ingenuity and prudence, than for thoſe of courage and intrepidity. In ſhort, it is the preſervation of the common-wealth which conſtitutes our glory.

REMARKS *upon* HONOUR *and a* MILITARY LIFE.

A Warrior bids adieu to every thing dear to him. His moſt active and predominant paſſion is to bring down injuſtice, to reſtore the oppreſſed to their former ſtate, and to maintain the tranquillity of ſociety in general: If this object does not ab-

ſorb all other ſentiments, it at leaſt maſters them, and keeps them in awe. A warrior thus impulſed overlooks his reſt, his pleaſures, his family, and his private intereſt, to run after glory. He pities thoſe who ſhun danger, and thinks himſelf happy to be employed preferrably to another, either in the heat of an action, or in ſome hazardous commiſſion.

All the thoughts of the military man center in one ſingle object. He has ever the ſame proſpect in view, that is, HONOUR. But what is honour? can a definition of it be given?

Honour is the applauſe we receive from our own conſcience and from the public, in whatever we undertake for the public good, at the peril of our reſt and life.

Courage, which is the common object of theſe applauſes, does not always attain them. It may be a meer ſally of the blood; or even a brutiſh tranſport more worthy of our execration than praiſe. Honour never becomes the reward of courage, but when it has our duty for its rule, and is rendered practical by the love of ſociety. Arms ſhould never be uſed but in conformity to the laws, for ſelf-preſervation, and for the public good. Any other uſe of them ſets us on a level with the wolf and the bear, who are in the world only for themſelves.

There is then a falſe honour and a true honour. Falſe honour is the illuſion of brutality, which in defiance of government, dares diſpoſe both of our own life, and that of others; by way of challenges and duelling. Falſe honour therefore exalts unmanly actions; actions which we are obliged to truſt to none but ſolitude and darkneſs; becauſe the laws, conſcience, and ſociety, are all againſt them: On the contrary; true honour is liable to no reproach nor contradiction. It is as pure and bright as the ſunſhine in which it appears. It never has recourſe to precaution and artifice; becauſe it approves of no actions that fear the light: And is therefore courted by magnanimous men.

Whence aroſe the Name of PROTESTANT.

IN the year 1521, Luther having made great progreſs in his detection of the Iniquitous Doctrines of the Church of Rome, was proſcribed by the Edict of Worms, as an Heretick and Schiſmatick, and all perſons prohibited to receive him, or to read his books. This not being found ſufficient to put a ſtop to his work of Reformation, the Princes of the Empire were convened at Spires in Germany, in the year 1529, and by a majority, that diet decreed, "That in thoſe places where the Edict of Worms had "been received, it ſhould be lawful for no one to change his re"ligion. That in thoſe places where the new (i. e. the Lutheran) "religion was exerciſed, it ſhould be maintained, till the meet"ing of a council, if the ancient (i. e. Popiſh) religion could not "be reſtored, without danger of diſturbing the publick peace: "But that the maſs ſhould not be aboliſhed, nor the Catholicks "hindered from the free exerciſe of their religion, nor any one

" of them allowed to embrace Lutheraniſm. That the Sacra-
" mentarians ſhould be baniſhed the Empire. That the Anabap-
" tiſts ſhould be puniſhed with death. And that no preachers
" ſhould explain the goſpel in any other ſenſe, than what was ap-
" proved by the church," meaning the Church of Rome.

John, Elector of Saxony, George, Marquis of Brandenburg, Erneſt and Francis, Dukes of Lunenburg, Philip, Landgrave of Heſſe and Wolffy, and Prince of Anhalt, ſix Princes of the Empire; and the following free Cities of Germany, viz. Stratſberg, Nuremberg, Ulm, Conſtance, Lindau, Mimmingen, Kempen, Nordlingen, Halibrun, Rettlingen, Iſne, St. Gall, Neiſſenberg, and Whindſcheim, entered their proteſt againſt the ſaid decree, which reſtrained and offered violence to the conſcience of men, by the influence of the Popiſh Prelates, and from thence forward, they, and all men who have ſeperated themſelves from the doctrines and practices of the Church of Rome, were called PROTESTANTS.

A Letter from SELIM *in* ENGLAND *to* MIRZA *at* ISPAHAN *concerning the* Liberty of the Preſs.

I Was this morning with ſome gentlemen of my acquaintance, who were talking of the attempt that had been made not long ago of ſetting up a preſs for printing at Conſtantinople, and the oppoſition it had met with from the Mufti. They applied to me for my thoughts on the affair, and to know whether in Perſia alſo it was our *religion*, that deprived us of ſo uſeful an art.

I told them that *policy* had more part than *religion* in that affair; that the Preſs was a very dangerous engine, and the abuſe of it made us juſtly apprehend ill conſequences from it.

You were in the right, ſaid one of the company, for this ſingle reaſon, becauſe your government is a deſpotic one: but in a free country the preſs may be very uſeful, as long as it is under no correction: for it is of great conſequence that the people ſhould be informed of every thing that concerns them: and without *printing* ſuch knowledge could not circulate either ſo eaſy or ſo faſt; and to argue againſt any branch of liberty from the ill uſe that may be made of it, is to argue againſt liberty itſelf, ſince all is capable of being abuſed. Nor can any part of freedom be more important, or better worth contending for, than that, by which the ſpirit of it is preſerved, ſupported and diffuſed. By this appeal to the judgment of the people, we lay ſome reſtraint upon thoſe miniſters who may have found means to ſecure themſelves from any other leſs incorruptible tribunal. And ſure they have no reaſon to complain, if the public exerciſes a right which cannot be denied, without avowing that their conduct will not bear enquiry: for though the beſt adminiſtration may be attacked by calumny, I can hardly believe it would be hurt by it; becauſe I have known a great deal of it em-

employed to very little purpoſe againſt gentlemen in oppoſition to miniſters, who had nothing to defend them, but the force of truth according to the old maxim, *magna eſt veritas, & prevalebit.*

The Gentleman, that ſpoke thus, was contradicted by another of the company, who with great warmth, and many arguments, maintained, That if the preſs was put under the inſpection of ſome diſcreet and judicious perſon, it would be far more beneficial to the public.

I agree to it, anſwered he, upon one condition, *viz.* That there may be likewiſe an *Inſpector for the people*, as well as *one for the court*: but if nothing is to be licenſed on *one ſide*, and every thing on the *other*, it would be vaſtly better for us to adopt the eaſtern policy, and allow *no printing* here at all, than to leave it under ſo partial a direction.

Extract of Mr. Pope's *Letter to* Henry Cromwell, *Eſq;*
Oct. 19, 1709.

MR. Pope having charged a Gentleman, whom he calls a ſcoundrel for inſinuating ſome malicious untruths againſt him to his dear friend Mr. Wycherley; by which he apprehends he had loſt Wycherly's correſpondence and friendſhip, proceeds with this tranſition from the unconſtancy of men to the fidelity of dogs—"The loſs of a faithful creature, ſays he, is ſome-"thing, tho' of never ſo contemptible a one; and if I were to "change my dog for ſuch a man as the aforeſaid, I ſhould think "my dog undervalued; who follows me about as conſtantly "here in the country, as I was uſed to do Mr. Wycherly in the "town."

"Now I talk of my dog, that I may not treat of a worſe ſub-"ject, which my ſpleen tempts me to, I will give you ſome ac-"count of him: a thing not wholly unprecedented, ſince Mon-"taigne (to whom I am but a dog, in compariſon) has done the "very ſame thing of his *cat*. *Dic mihi quod melius deſidioſus "agam?* You are to know then, that as it is likeneſs that begets "affection, ſo my favourite dog is a *little one*, a *lean one*, and none "of the *fineſt ſhaped*. He is not much a ſpaniel in his fawning, "but has (what might be worth many a man's while to *imitate* "from him) a *dumb ſurly ſort of kindneſs*, that rather ſhows itſelf, "when he thinks me ill uſed by others, than when we walk qui-"etly and peaceably by ourſelves. If it be the chief point of "friendſhip to comply with a friend's monitions and inclinati-"ons, he poſſeſſes this in an eminent degree. He lies down when "I ſit; and walks when I walk: Which is more than many good "friends can pretend to; witneſs our walk, a year ago, in "St. James's Park—Hiſtories are more full of examples of the "fidelity of Dogs, than of friends, but I will not inſiſt upon many "of them; becauſe it is poſſible, ſome may be almoſt as fabu-"lous, as thoſe of Plyades and Oreſtes, &c. I will only ſay for "the honour of Dogs, that the two ancient and eſtimable books

"(ſacred

" (ſacred and prophane) extant (viz. *Scripture* and *Homer*) have a " particular regard to theſe animals. That of Toby is the more " remarkable, becauſe there was no manner of *reaſon* to take no- " tice of the Dog, beſides the great humanity of the author. " And Homer's account of Ulyſſes's Dog *Argus*, is the moſt " pathetic imaginable, all the circumſtances conſidered, and an " excellent proof of the old Bard's good-nature. Ulyſſes had " left him at Ithaca, when he embarked for Troy, and found him " on his return, after twenty years: (which by the way is not " unnatural, as ſome criticks have ſaid, ſince I remember the " *Dam of my Dog*, who was twenty-two years old when ſhe died) " may the omen of longevity prove fortunate to her ſucceſſor!" you ſhall have it in verſe.

WHEN wiſe Ulyſſes from his native coaſt,
Long kept by wars, and long by tempeſts toſt;
Arriv'd at laſt, poor, old, diſguis'd, alone,
To all his friends, and e'en his Queen unknown:
Chang'd as he was, with age, and toils, and cares;
Furrow'd his rev'rend head, and grey his hairs:
In his own palace forc'd to aſk his bread,
Scorn'd by thoſe ſlaves, his former bounty fed:
Forgot of all his own domeſtic crew,
His faithful Dog his rightful maſter knew,
Unfed, unhous'd, neglected, on the clay,
Like an old ſervant now caſhier'd lay:
And tho' e'en then expiring on the plain,
Touch'd with reſentment of ungrateful man,
And longing to behold his ancient Lord again.
Him when he ſaw, he roſe, and crawl'd to meet,
'Twas all he could, and fawn'd, and kiſs'd his feet,
Seiz'd with dumb joy; then falling by his ſide,
Own'd his returning Lord—look'd up—and dy'd.

" Plutarch who (if I have any taſte, is the greateſt of moral " philoſophers) relating how the Athenians were obliged to aban- " don Athens, in the time of Themiſtocles, ſteps back again out " of the way of his hiſtory, to deſcribe the lamentable cries and " howlings of the poor dogs, when left behind. He makes " mention of one that followed his maſter acroſs the ſea to " Salamis, where he died, and was honoured with a tomb by " the Athenians, who gave the name of the Dog's Tomb to " that part of the Iſland, where he was buried.—This reſpect " to a dog from the moſt polite people in the world is very " obſervable.—A modern inſtance of gratitude to a dog, (tho' " we have but few ſuch) is that the chief order of Denmark (now " called the order of the *Elephant*) was inſtituted in memory of " the *fidelity* of a *Dog*, named *Wild Brat*, by one of their Kings, " who had been deſerted by his ſubjects, and gave this motto, " unto this effect, which ſtill remains, *Wild Brat was faithful.*—

" Sir

"Sir William Trumbul has told me a story, which he had from one that was present, when our King Charles II. being with some of his court, during his troubles, and a discourse arising what sort of dogs deserve preeminence, and it being on all hands agreed to belong either to the *Spaniel* or the *Greyhound*. The king gave his opinion on the part of the *Greyhound*, because, said he, it has all the good nature of the other without the *fawning*. A fine piece of satire upon his courtiers! with which I will conclude my discourse on dogs. Call me a Cynick or what you please, in revenge for all this impertinence, I will be contented, provided you will but believe me, when I dare a bold word for a christian, That of *all Dogs* you will find none more faithful, than

Your's &c.

A. POPE."

The POWER *of the* COLLEGE *of* PHYSICIANS, *in regard to* EMPIRICKS.

IN an age of infatuation in favour of *Quackery*, when wealthy men of no education, or at least not such education as is required to train up a Practitioner in Physic, publickly advertising and administring their nostrums for almost every disease and distemper of the human body, and multitudes giving up health and life into the hands of ignorant pretenders, whose *audacity* is more dangerous than a complication of distempers, without interruption or public censure and punishment from those empowered to be the guardians of health and practice of physick within this kingdom; let it not be thought an officious nor a needless trouble, to inform those whom it may concern, what the laws of this land say touching Empiricks.

Lord Coke in his 3d Institute, p. 251. tells us, "If one that is of the mystery of a Physician, takes a man in cure, and giveth him such physick, as within *three days he dies thereof*, without any felonious intent, and against his will, it is no *homicide*." And then proceeds to cite *Britton*: "That if one that is *not* of the mystery of a physician or chirurgeon, take upon him the cure of a man, and he *dieth of the portion or medicine*, this is *voluntary felony*." And the charter granted by Act of Parliament in the reign of Hen. VIII. to the College of Physicians in London, gives them power to regulate the practice of physick, in the city, suburbs, and within *seven* miles round London, and to punish in a penalty of 5l. per month, those who should practice physick, without being first admitted by the President and Community of the said College. And ordains, That no person shall practice physick *thro' England*, without *letters testimonial* from the Presidents and Elects of their approving and examination, except a graduate of *Oxford* or *Cambridge*. In pursuance of which Charter, and Act of Parliament, the College for many years brought actions against several Empiricks; and thought themselves so authorized sufficiently for the public good, that they refused to dispense with one Buck, an

Empirick,

Empirick, who had engaged the celebrated Francis Walſingham, Eſq; Secretary to Queen Elizabeth, to crave that favour of the College of Phyſicians.

But the caſe of Jenkins and Read, eſtabliſheth their power beyond all doubt. Theſe Empiricks being impriſoned by the College of Phyſicians, brought their cauſe by the writ *Corpus*, before Lord Chief Juſtice Popham in 1602. But when the Juſtice had read the ſtatutes relating to phyſick, he aſked Jenkins how he durſt practice phyſick without a licence from the College. Jenkins pleaded that he practiſed as a ſurgeon, and in that art the uſe of inward remedies is often neceſſary. The Juſtice anſwered, That in ſuch caſes a phyſician was to be called, it being upon no ſuch account lawful for the ſurgeon to invade the phyſicians province. And further he declared, That the authority of the College to impriſon was legal and valid, and alſo ordered him to be returned to priſon, 'till he had given ſatisfaction to the preſident and cenſors.

Upon the whole, the Chief Juſtice among others, determined, That there is no ſufficient licence without the College Seal.—That the authority of the College is ſtrong and ſufficient to commit to priſon.—That the Lord Chief Juſtice cannot bail or deliver the College priſoner; but is obliged by law to deliver him up to the College cenſure.—And that no man, tho' ever ſo learned a Phyſician or Doctor, may practice in London or within ſeven miles, without the College-Licence.

REAL FRIENDSHIP.

REAL FRIENDSHIP is rarely to be found. Antiquity furniſheth but few inſtances of it; the preſent age ſcarce one. The example I ſhall produce of this generous, diſintereſted, and virtuous paſſion, is not from our own country; but from the Hiſtory of Poland.

Octavius and *Lenbellus*, two young gentlemen of Wilna in Lithuania, were bred up together, and were inſeperable companions: They ſeemed to have but one will or two bodies, actuated by one ſoul: So that reaſon and juſtice always regulated their ſentiments when they differed. While they were at the Univerſity, Octavius fell in love with Paulina, a lady of ſuperior rank, both as to birth and fortune, and moreover deſtined by her relations, for Gelaſius, a young nobleman, whoſe haughtineſs in his addreſſes to the young lady, gave her ſuch a diſguſt towards his perſon, that ſhe preferred the gentleman, Octavius, in her heart, to the nobleman. Gelaſius ſuppoſing that the Lady's averſion to him, was occaſioned by his rival Octavius, threatened him with his reſentment. Octavius only anſwered, That inclination was free, and if he could engage that of Paulina, it was not his reſentment that ſhould make him deſiſt. The conſequence of which anſwer was, that they were thoroughly diſpleaſed with each other.

Gelaſius prevailed with Paulina's relations to forbid all inter-

course and correspondence between her and Octavius, and to oblige her to look upon Gelasius as one designed to be her husband, which increased her aversion to Gelasius, and her affection for Octavius. Gelasius saw its effects, and resolved to remove his rival. And informed by spies hired on purpose, that Octavius frequently entertained Paulina at her window, took with him a friend named Megasius, and a servant, and form'd an ambush near Paulina's house to intercept the lover. At the time expected, Octavius advanced with his friend Leobellus, who at the appearance of Paulina, by a signal given, retreated to give the lovers an opportunity to converse. But immediately the servant fell upon Leobellus, while Gelasius and Megasius took the task of dispatching Octavius. Leobellus soon disabled the servant, and flying with speed to the assistance of Octavius, found him with his back to a wall, maintaining a very unequal fight; and at the first thrust he laid Gelasius dead; and then running upon Megasius, wounded him and made him fly; he himself having received no hurt: but Octavius was desperately wounded.

This affair was represented by Megasius to the friends of Gelasius, to be a treachery contrived by the two friends, who had assaulted them in the dark; which being deposed before the Magistrates, Octavius was taken, but Leobellus made his escape; concealing himself, with hopes to find an opportunity to prove his own and his friend's innocence. However, Octavius was tried, and upon the sole evidence of Megasius, was sentenced to loose his head; and he was already brought upon the scaffold to be executed, when Leobellus rushing through the crowd, called to the executioner to stop his hand, for that he himself was the only person guilty. And mounting the scaffold, declared the truth of the matter to the Magistrates, cleared his friend, and offered his own life to satisfy the law. The whole multitude cried *pardon*, and the Magistrates carried back the two friends to the Hall, to rehear the cause. When in the presence of the Palatine of Wilna, the two friends generously contesting, which should die to save the other, he patiently heard every circumstance of this dark affair; and having heard with pleasure and surprize, Leobellus plead for his friend's discharge, said, "So far am I from judging you guilty, or condemning you to death, that I cannot but look upon what you have done, to be a glorious action. I therefore acquit you both, and adjudge Megasius to loose his head for his treachery and perjury. And request, as a favour, to be admitted a *third* into your friendship." He also procured Octavius the happiness of his Paulina; married Leobellus to a relation of his own, and recommended them both to advantageous posts in the Court of Poland.

PRACTICAL HUSBANDRY.

Of SOILS, *and how to bring them to a proper State.*

THE Earth that presents itself first to view, is generally a mixture of the soil underneath, with every adventitious substance. This is called mould, and increases in depth by every thing that falls or is laid upon it. This

This and the underturf, for about one foot deep, being enriched with all that the air, dews, showers, sun and frost can contribute to it, is accounted the best and sweetest. And the fatness of the underturf earth, drawn up by the sun, and kept free from weeds, is of all uncultivated moulds, the most grateful to the Husbandman.

The subjacent moulds are valued as they approach this in virtue. The best of these is black, fat, porous, light, without sand and gravel, and which will rise after exposed to air, without crumbling into dust. And this is fit for any use without much manure. But there requires great knowledge and labour to render less fertile soils, such as clay, sand, gravel, &c. to answer the purposes of Husbandry. For where there is clay, the root can't properly seek its food. And sand or soils of a light nature, are too loose to give proper stability to plants, or to retain the moisture necessary to convey nourishment to them.

First then it is necessary to shew how these extremes may be corrected, and then to point out the method of keeping the superficial mould in heat.

Of STRONG MOULDS, *and their* CULTIVATION.

UNDER this head we include Clays of all sorts. Some are so obstinate as scarce to be subdued by art, others are fatter and unctuous. The former includes the blue, white and red clay, if strong. The fat and unctuous clay frequently lies upon the other, with a bed of chalk beneath. The stony and blue sort is sometimes tolerable. And fruit trees thrive in light brisk earth. In general, clay is of all earths the worst for vegetation: For its closeness hinders plants from extending their roots for their necessary food, and prevents the entrance of water to convey it to them. Yet any of them may be cultivated so as to produce a crop that requires the lightest and holloweſt mould; for their great cohesion is broke by sea sand; that full of shells is the best; but where that is not to be had, river sand, drift sand, small gritty gravel, lime, rubbish of old houses, chalk, marle, coal-ashes, and all substances which burn into lime, and with which acids effervesce or rise in numerous bubbles, will do the same service.

Where observe, That the best sand is reddish, the next sort blue, and then the white. In all, the most shelly and coraline is the best, and that which is taken up from under the salt-water, either by dredges, or being left open by the ebbing of the tide, is to be preferred for use, if imployed before it be dried long in the sun. *Blown* sand is accounted of no use.

A barge load of sand will dress an acre, if the land be tolerably good. But the benefits arising from this manure, are not to be expected before the third year; because it consists of hard substances, which require time to dissolve them. But then they enrich the land for many years; and the good and lasting effects of shelly sand for the improvement of clay, afford a strong presumption, that there is an-

acid in the clay, which the shells absorb and correct; for when that acid is removed, the clay becomes mellow.

Small gritty gravel operates nearly in the same manner in very stiff and sour lands, leaving in it as few stones as possible.

Marle is a particular good manure for clay; and coal ashes are singularly beneficial to stiff and sour lands, or clayey grounds.

Lime does more service in clay, when spread on the lands in the stone, unburnt, and broke into small pieces.

But besides these adventitious substances, the husbandman must improve his land by frost and snow. If he has a harsh, churlish, obstinate clay, to cultivate, let him turn it up in ridges in winter; and, after the first frost, when the earth thaws and moulders, then throw in ashes, &c. "for the time being nicked wherein you can catch the clayey corpuscules under the greatest disunion and separation, is the time for keeping them so, by mixing with them these other lighter bodies, which will the longest prevent their reuniting."

In those countries where there is heath ground, peat and turf enough, the husbandman will find means to improve his clayey land by mixing a bushel of heath and turf ashes, to a load of heath unburnt, or by rotten turf or peat, dried and broken to pieces.

These are the means recommended by the greatest practical writers on husbandry; yet that of *pulverizing* the earth by contusion, and breaking it with the plow or spade, is of most admirable effect, all dungings, and other sordid temperings, being but the vicars succedaneous to this improvement, which, of all others, makes its return of fruit, or whatever else it bears, without imparting any of those ill qualities, which we sensibly discover in forced grounds.

The GARDENER's General KALENDAR *for the Month of* MARCH.

I Shall introduce this Month's Cultivations of the Garden, with some general and indispensible observations.

They that prefer utility to show, can't set about an easier and more profitable branch of culture, than that of a Kitchen and Fruit-Garden; which may be very properly intermixed, and occupy one and the same spot of ground: because they both require a good deep soil, and nearly the same exposure.

The chief things to be considered in these gardens, are the situation, the soil, the conveniency of water, the extent of the ground inclosed, and the manner of inclosing it and laying it out.

The soil should be rich, rather stiff than light, and considerably deep. The situation should be nearly level, to prevent heavy rains washing away the richest part of the mould; and those gardens thrive best, which lie warm either to the South-East or South, or protected from the North and North-East by high grounds, or lofty trees planted at some distance.

Whatever

Whatever the ſoil be, the mould ſhould be deep enough to afford the roots room to extend themſelves: and trenching is the moſt effectual means to obtain a conſiderable depth of well-looſened mould. And if the ſoil underneath is ſtiff, frequent trenching is proper; and if naturally ſtrong, the laying of it rough in the winter is more advantageous.

Plenty of water muſt be provided; and the beſt is pond water; but where that can't be provided, expoſe the well-water to the ſun and air for ſome time before it be uſed; for there is a rawneſs in well-water, that is very diſagreeable to vegetables.

As to the extent of the ground, that muſt ſuit every one's conveniency, only with this obſervation; that it muſt be ſo managed, as to allow ſufficient room to ſtir the earth between the plants as they grow.

Brick walls make the beſt encloſure: and thoſe of nine or ten foot high are ſufficient for moſt ſorts of fruit: and in the diſtribution of this ground, lay the walks out ſo as to obtain the greateſt convenience for ſupplying each part of it with manure and water; and to admit as eaſy an acceſs as poſſible to its different quarters.

The WORKS *of this* MONTH.

IN the *Kitchen-Garden* ſow radiſh, all ſorts of lettuce, ſcorzonera, peas and broad beans. Plant out colliflower plants, ſlip ſkirets of the laſt year, leaving only the tender fibres, and not any of the greater roots about the plant. Make plantations of rue, tanſey, mint, balm, thyme, ſage, penny-royal, ſavery, and other durable herbs for houſhould uſe, except lavander and roſemary. Refreſh cucumber and melon beds with hot dung, and ſow new for a full crop. Tranſplant lettuce intended for cabbage and to ſtand for ſeed. Sow cabbage and ſavoys for winter crop, and ſellery for early blanching. Sow chardones to tranſplant in April: and dreſs the artichokes, leaving only three or four ſuckers on each ſtrong root, and ſlipping off the reſt for tranſplanting.

About the middle of this month rake and dreſs aſparagus beds; and make new plantations of it in the natural ground.

About the end of the month ſow young ſallads in a warm ſituation, and ſpinnage, rape, ſorrel, finochia, leeks, beet, chervil, fennel, dill, and burnet, and endive, very thin to prevent its running to ſeed.

Dreſs up ſtrawberry beds ſo as to keep them clear from runners till the plants bloſſom; and water them when neceſſary.

Great care muſt be taken to ſhelter trees and plants from the injuries of the weather. Young planted herbs and trees muſt be watered in the morning, and weeds muſt be deſtroyed and not ſuffered to run to ſeed.

In the *Fruit-Garden* put an end to the plantation of fruit-trees, and finiſh the pruning of peaches, nectarines, and apricots. Cut off the heads of new planted wall-trees; reducing them to five or

ſix buds. Prune the fig-tree, cutting all the great wood that can be ſpared cloſe to the ſtem; graft apples upon crab-ſtocks, and cherries on the black cherry; and cut off the head of thoſe ſtocks which were inoculated the laſt ſummer, at two inches above the bud ſlopewiſe, beginning the ſlope oppoſite to the bud. Lay layers of the vine and fig; and ſhelter the bloſſoms of the wall-fruit from the nipping froſts and blighting dews.

In the *Flower Garden* ſow poppies, roſe campion, acanthus and other annuals; ſow the ſtock-gilly-flower, and the ten week ſtocks, a few every fortnight in the common earth: Part or ſlip all fibrous rooted plants, not in flowering, ſuch as ſweet-williams, ſcarlet lychnis, roſe campions, double walls, hollyhocks; defend tulips from blights; pot or tranſplant carnations for blowing; plant and make layers of the paſſion tree; ſlip and ſet box edgings, and tranſplant the philyrea, holly, and other evergreens.

In the *Green-houſe* take care that the orange and lemon trees don't want water; uſe them by degrees to the air, both which muſt be done with great diſcretion; tranſplant the winter cherry, prune its roots, ſhorten the branches, give it freſh earth, and place it in the front of the Green-houſe.

To the PROPRIETORS *of the* GENERAL MAGAZINE.

I lately met with a Pamphlet printed at *Francfort*, in the year 1626, by Mr. GEORGE EGLISHAM, one of K. JAMES the firſt's Phyſicians, and intitled, the Forerunner of Revenge upon the Duke of BUCKINGHAM: in which we have a plain Narrative of the ſaid Monarch's being poiſoned by that Duke, his great favourite; which if it be worthy of a place in your Magazine, is as follows, excepting a little variation in the diction, to make it more agreeable to a modern reader.

Concerning the *Poiſoning* of KING JAMES.

THE Duke of *Buckingham*, during his ſtay in Spain, being adviſed, that the King's favour for him began to abate, and that this was occaſioned by the freedom with which the Marquiſs of Hamilton had reprehended King James for ſending the Prince with ſuch a young man without experience, and in ſo private and ſudden a manner, haſtened his return to England; and behaved at Court with ſuch arbitrarineſs, that he took upon him to controul what the King himſelf had commanded in the houſhold; and took upon him to open the King's letters from foreign Princes, and to anſwer them in ſuch a manner as he thought convenient, without conſulting or acquainting the King therewith.

Such a conduct did not fail to open the King's eyes more and more, ſo that his Majeſty could not help ſhewing his diſlike; and Buckingham obſerving, that the King reſerved Lord Briſtol to be a ſcourge for him, urging daily the Duke's diſpatch to the Court of France; and his Grace fearing, that, if Gondomar ſhould, during

during his abſence from England, arrive from Spain, that he would complete his ruin in the King's favour, and knowing alſo that the King had been informed by ſeveral of his Nobility and Privy Council that he had ſaid, after his coming from Spain, that the King was an old man, and that it was now time for him to be at reſt, or confined in ſome park to ſpend his life in hunting, and for the Prince to be crowned; his Grace made every ſhift in his power to delay his journey to France.

In the mean time the King was ſeized with a tertian ague; a diſorder, eſpecially in the ſpring, never found mortal.

On this occaſion, the Duke took the opportunity, while the Phyſicians were at dinner on the Monday before the King died, and without their knowledge or conſent, to offer the King a white powder to take by way of medicine. The King withſtood him and refuſed to take that powder for a long time; but was at laſt prevailed upon by his flattering importunity, and drank it in wine. His Majeſty immediately felt the bad effects, and grew worſe with faintings and exceſſive pains, and violent fluxes of the belly tormented; and then cried out, *O this vile powder! This vile powder!* Would to God I had never taken it. *It will coſt me my life.* But fearing that this would not do the job effectually, the Counteſs of Buckingham, his Grace's Mother, taking the ſame advantage of the Phyſicians being at dinner on the Friday following, perſuaded the King to let her put a plaiſter to his royal ſtomach, which immediately made his Majeſty faint, ſhort breathed, and full of pain: and this plaiſter was ſo diſagreeable even to the ſmell, that ſome of the Phyſicians, returning from dinner to viſit the Royal Patient, perceived that ſomething had been done to hurt him, and upon examination exclaimed and declared, *That the King was poiſoned.*

Buckingham upon this diſcovery entered the King's chamber; commanded the phyſicians to withdraw; ordered one to be confined to his own chamber, another to depart the palace, and in general, Buckingham behaved with ſo much licentiouſneſs, that he offered to draw his ſword upon his Majeſty's ſervants, in the preſence of his dying Sovereign: While the Counteſs his mother fell upon her knees at the King's feet, and with a brazen face, cried out, juſtice, juſtice, Sir, I demand juſtice from your Majeſty. The King alarmed with ſuch proceedings, aſked the Counteſs for what? She anſwered, For that, which their lives is not a ſufficient ſatisfaction; becauſe they ſay, That my Son and I have poiſoned your Majeſty. Poiſoned me? ſaid the King. With thoſe words his Majeſty turned himſelf, and fainted away; and ſhe was removed.

The King died on the Sunday following; upon which Buckingham deſired the Phyſicians, who attended the King in his illneſs, to ſign a Teſtimonial, That they believed the powder, which his Grace gave the King, was a good and ſafe medicine. But they refuſed ſo to do. However, immediately after the King's death, the Phyſician, who had been confined to his chamber, was

ſet

ſet at liberty, with orders to hold his tongue; and all the reſt were ſilenced with threats of ſtrong pains and penalties. But in the mean time the King's body and head ſmelled above meaſure; his hair and ſkin of his head ſtuck to the pillow, and his finger and toe nails grew looſe.

NATURAL PHILOSOPHY, *continued from* Page 28.

WE ſhall now proceed to the parts and ſubdiviſions of *Phyſiology*, or *Natural Philoſophy*.

Natural Philoſophy is properly divided into theſe four parts, *viz.* 1. SOMATOLOGY, which treateth of the common Nature, Properties and Qualities of Matter, and its various Combinations in natural Bodies. 2. COSMOLOGY, or *Uranology*, which treats of the Nature, Conſtitution and compenant Parts of the Univerſe in general, and of the ſolar Syſtem in particular. 3. AEROLOGY, which treats of the Nature of the Atmoſphere, or Region of the Air, and all the phænomenon or appearances belonging thereunto. And 4. GEOLOGY, which treats of the Nature, make 7 parts and Productions of the Globe of Earth, on which we live.

Theſe general parts are ſubdivided into ſeven Branches: *Somatology*, as it conſiders the common and ſpecial properties of natural Bodies, is divided with reſpect to them in the manner you ſhould be ſhewn hereafter. 2. *Coſmology* or *Uranology* comprehends *Heliography*, which treats of the Sun; *Selenography*, which treats of the Moon; *Planetography*, which treats of the Planets; *Cometography*, which treats of the Comets; and *Aſtrography*, which treats of the fixed Stars. 3. *Aerology* is divided into *Aerography*, which treats of the Atmoſphere, or Body of the Air; *Anemography*, which treats of the Winds; *Meteorography*, which treats of the Meteors; *Phantaſmatography*, which treats of celeſtial Appearances, or ſuch Phænomenon, as exiſt only in Viſion, and not corporally. And 4. *Geology* is divided into *Geography*, which treats of the Earth or Land; *Hydrography*, which treats of Water; *Phyſography*, which treats of Plants or Vegetables; and *Zeography*, which treats of Animals of all kinds.

In treating of which Science in all its branches, the Reader will be furniſhed with abundance of uſeful knowledge, and not ſpend his precious irrevocable time in idle and profane amuſements. Such ſubjects will yield not only much delight and rational pleaſure, but will make men wiſe and happy. And for this great end I ſhall, in my next, lay down certain fundamental principles, rules and precepts, for his improvement in the ſtudy of natural Philoſophy.

The

The Compleat MODERN HOUSEWIFE, *continued from* Page 24.

IN the month of *March* at Dinner, let your *firſt Courſe* be a boiled turkey with oyſter ſauce at top; or a couple of roaſt tongues, or roaſt beef at bottom; pickles in the middle; and a pigeon pye, and calve's-head haſh for two ſide diſhes; at the four corners, ſtewed crabs, or oyſters, hunter's pudding, a brown fricaſey, ſtewed eels, or broiled whitings. The *ſecond Courſe*; wood-cocks or wild-ducks at top; pig or hare at bottom; jellies or ſweetmeats in the middle; at the four corners, raſberry cream tarts, ſtewed apples and preſerved apricots.

For Supper; at top a ſack poſſet; remove, a couple of ducks; at bottom, a boiled turkey and oyſter ſauce: in the middle lemon poſſet; two ſide diſhes a roaſted lobſter, and oyſter pye: at the four corners, almond pudding, cuſtards, ſlummery, cheeſe-cakes and ſtewed apples.

How to Dreſs this Dinner and Supper.

IN theſe directions I ſhall only give Receipts for ſuch things as appear to want moſt experience.

Roaſt Tongue is thus performed; cut off the root, rub the tongue very well with an ounce of ſalt-petre, mixt with a little bay-ſalt and common ſalt; let it lie a week or ten days to make it red; but not ſalt; boil this tongue ſo tender that it will blanch; ſkin it well, and having ſtrewed it over with a few bred crumbs, ſet it before the fire to harden and brown on every ſide. The ſauce for a roaſt tongue is a mixture of bread crumbs wetted with as much red wine as to make them red; a little beaten cinnamon ſweetened to the palate; put this ſauce in two baſons on each ſide the tongues, and a little gravy into the diſh with each tongue.

A *Calf's-head Haſh*; take a whole head and boil it; when it is cold, cut off the fleſh of one half in thin ſlices; put thoſe ſlices into a ſtew pan with a little brown gravy, a ſpoonful of catchup, a little claret, a little ſhred mace, a few ſhred capers, or a little mango; put this mixture over a ſtove, and thicken it with butter and flour. Take the other half of the head, cut off the bone-ends and ſcore it with a knife, ſeaſon it with a little pepper and ſalt, rub it over with the yolk of an egg, and ſtrew over it a few crumbs of bread and a little parſley; in this manner ſet it before the fire to broil till it grows brown: when you diſh up the haſh-part lay this in the middle, and garniſh the diſh with the brains made into cakes, force-meat balls, and criſp brown.

To make *Brain Cakes* you muſt take a ſufficient quantity of bread crumbs, a little fine ſhred lemon peel, pepper, ſalt, nutmeg, ſweet-majorum and parſley ſhred fine, and the yolks of three eggs; ſkin the brains, boil and chop them very ſmall, and mix altogether; take this mixture and drop them into a pan with butter like as you do fritters; and if you find the butter too thin, put in more bread crumbs.

SERMONS, By CHARLES CHURCHILL.

THE *Sermons* which the late Rev. Mr. *Charles Churchill*, celebrated for his poetical ſatire, promiſed to publiſh before his death, with a dedication, are at laſt publiſhed by his Executor; they having been all prepared for the preſs, and only wanted the finiſhing hand to the dedication.

This little volume, which conſiſts of ten ſermons only, is introduced by two great ſingularities in works of this nature. Here is no attempt to impoſe an opinion of the work by a pompous title page, adorned with academical or eccleſiaſtical titles and dignities; or by long recital of the author's church-preferments: But it is no more than, The Sermons of *Charles Churchill*; as if he was conſcious of his own value, and that his name alone, undignified, unpreferred, would be a greater recommendation to the Public, for their *language* and *ſound doctrine*.

The other particularity is, a *dedication* in *rhime*, before a volume of ſermons; and a dedication that conveys very little propriety in the author, who choſe to erect a monument to his own ſpleen, before his comment on the LORD'S PRAYER.

In this dedication Mr. *Churchill* declares:

Truth beſt becomes an *orthodox* Divine,
And, ſpite of hell, that character is mine.
——— In purſe tho' poor,
In ſpirit I'm right proud, nor can endure
The mention of a bribe———
'Tis not thy name, though that indeed is great;
'Tis not the tinſel trumpery of ſtate;
'Tis not thy title, Doctor, tho' thou art;
'Tis not thy mitre, which has won my heart.
State is a ſame, names are but empty things,
Degrees are bought, and, by miſtaken Kings
Titles are oft miſplaced; mitres, which ſhine
So bright in other eyes, are dull in mine;
Unleſs ſet off by virtue.———
Thy virtue, not thy rank, demands my lays;
'Tis not the Biſhop, but the Saint! I praiſe.

Let him, not gorg'd with power, and in ſtate,
Forget what once he was, tho' now ſo high,
How low, how mean, and full as poor as I.

As to the ſermons, they afford two teſtimonies; viz. The happineſs of the author's diction in the pulpit, and of his ſound divinity.

His language is expreſſive, his method eaſy, his ſtile clear and intelligible, and his arguments concluſive.

The doctrine will be beſt collected and underſtood in his own words.

The ſubject is prayer, which he treats of as a duty, in his two

firſt

firſt ſermons; and then, in particular, in the explanation of the *Lord's Prayer*, there is a ſeries of eight ſermons, upon the ſeveral parts to which he divides that prayer.

In the two former diſcourſes Mr. *Churchill* treats of the nature of prayer, the grounds on which that duty is founded, and the motives for, and the reaſonableneſs of, our performing it; and then proceeds to ſhew the qualifications neceſſary to obtain our petitions, and the benefits to be reaped thereby.

On p. 34, he has this obſervation on *fervency* in prayer. "Fervency, no doubt, is a very neceſſary and happy qualification of prayer; it introduces us to a more intimate familiarity with God, and, at the ſame time, it procures us bleſſings on earth, in ſome meaſure, gives us a fore-taſte of heaven: But great caution is requiſite, that this fervency be ſuch as is required by God: It ſhould be a gentle, pleaſing, heavenly flame, and not a head-ſtrong and outrageous fire, which hurries men into an enthuſiaſm; that makes a perſon fancy himſelf ſenſibly *actuated by the Holy Ghoſt.*"

The third ſermon begins the Lord's Prayer; in which he undertakes to explain in what reſpects God is ſaid to be *our Father*; and why we call him *Heavenly Father*.

He, amongſt other reaſons aſſigned, makes God our father, by regenerating us; "And, ſays he, no one can call God father, who is not actually entered into the Goſpel Covenant, and become a member of Jeſus Chriſt; who hath not been ſprinkled with the laver of regeneration, and ſanctified by the Holy Ghoſt; whoſoever believeth that Jeſus is the Chriſt, is born of God." p. 55.

"Never, ſays he, did greater levity appear, than in the preſent age. All things ſerious, ſolemn, and ſacred, are wantonly thrown away, or treated only as proper ſubjects of ridicule; and the religion of Chriſt, which ought to warm the hearts, and influence the principles of its profeſſors, is no more than ſkin-deep." p. 86. And in p. 87, 88, he adds, "All that the pert and public ſinner need to do now to eſtabliſh his reputation and wit, and be deemed the heroe of all polite aſſemblies, is to get rid of religion as ſoon as poſſible, to ſet conſcience at defiance, to deny the Being or Providence of God, to laugh at the ſcriptures, deride God's ordinances, profane his name, and rally his Miniſtry. Thus qualified, the world is his own, he carries all before him."

In his fifth ſermon, on that petition, Thy kingdom come, he ſays, "It is our indiſpenſible duty to plant and propagate the Chriſtian religion in our own colonies; and, as we reap their temporal things, to which we have I know not what right, to ſow in them ſpiritual things, to which our religion entitles them, without any other conſideration. Had we been more careful to perform our parts in this reſpect, had we endeavoured to civilize thoſe rude nations, and inſtil into them the principles of the goſpel, we had not ſo often lamented their virulent cruelty, and repeated perfidies."

I ſhall conclude theſe remarks with this quotation, from p. 156, "The Chriſtian life is a ſtate of trial and conflict: He, who

bought us with a price, hath a right to our obedience; and when he exempted us from the puniſhment of our ſins, he required us to forſake them, to abſtain from all wilful, and premeditated offences, and to repent of thoſe miſcarriages, which, through the frailty and infirmity of our nature, are unavoidable; above all, to pray to God for mercy and forgiveneſs; and, in order to obtain it, to be ready to forgive others; without which neceſſary condition, we cannot pray for the forgiveneſs of our own treſpaſſes."

To the PROPRIETORS *of the* GENERAL MAGAZINE.

AMONGST other improvements, I apprehend you will not object to a ſubject, which gives your readers the *ſentiments of great men, upon the important article of Death*; and other incidents that concur to illuſtrate and explain the principal matter: Becauſe I am perſuaded ſuch an undertaking tends to mend the hearts and manners of people. For examples of dying men have a vaſt advantage over a dry preceptive morality. So that I have not the leaſt doubt but that your readers will be both delighted and inſtructed by this *Death-bed Scene*; which opens with SOCRATES the Philoſopher.

The DEATH *of* SOCRATES.

THE Death of *Socrates*, the Athenian Philoſopher, is one of the moſt conſiderable events in all antiquity. That the Reader may have a juſt idea of this Prince of Philoſophers, we ſhall firſt recount a few particulars of his life. His firſt ſtudy was Phyſicks, the works of nature, and the movement of the Heavens, Stars and Planets. But after having found by experience, how difficult, how intricate; and at the ſame time how little uſeful that kind of learning was to the generality of mankind; he firſt thought of making Philoſophy more familiar, more uſeful in common life, more within the reach of man's capacity, and applying it ſolely to what might make them more rational, juſt, and virtuous. He found there was a kind of folly in devoting the whole vivacity of his mind, and employing all his time in enquiries merely curious, involved in impenetrable darkneſs, and abſolutely incapable of contributing to human happineſs, whilſt they neglected to inform themſelves in the ordinary duties of life.

He had accuſtomed himſelf early to a ſober, ſevere, laborious manner of living. It is difficult to carry the contempt of riches, and the love of poverty, farther than he did. He looked upon it as a divine perfection to want nothing, and thought, the leſs we are contented with, the nearer we approach to the divinity. But the peculiar auſterity of his life, did not render him gloomy or moroſe, as was common enough with the Philoſophers of thoſe times; for in company and converſation, he was ſtill gay and facetious, and the ſole joy and ſpirit of the entertainment.

But one of the moſt diſtinguiſhed qualities of this great man,

was a tranquility of ſoul that no accident, no loſs, no injury, no ill treatment could ever alter.

He ſeemed the common father of the Republick, ſo attentive was he to the happineſs and advantage of his whole country. But, as it is very difficult to correct the aged, who generally love the errors in which they are grown grey; he rather devoted his labours principally to the inſtruction of youth, in order to ſow the ſeeds of virtue in a ſoil more fit to produce the fruits of it. He had no open ſchool like the reſt of the Philoſophers of thoſe days, nor any ſet time for his lectures. He had no benches prepared, nor ever mounted a profeſſor's chair. He was the Philoſopher of all times and ſeaſons. He taught in all places, and upon all occaſions; in walking, in converſation, at meals, in the army, and in the midſt of the camp.

Such was *Socrates*. The ſervices he did the ſtate by the inſtructions he gave their youth, and the diſciples he formed, are inexpreſſibly great. Never had maſter ſo great a number, or ſo illuſtrious. *Plato*, who was one of his diſciples, uſed to bleſs and thank God for three things; that he had a rational ſoul, that he was born a *Greek* and not a Barbarian, and that his birth happened to be in the life-time of *Socrates*.

However, notwithſtanding all his virtues, he at laſt fell a Martyr to the envy and ſlander of his brother Philoſophers; he had delivered his opinion of them too freely; and having endeavoured to unmaſk their vices, and diſcredit their falſe eloquence, he had every thing to fear from their malice and revenge. Accordingly his enemies had ſworn his deſtruction. *Melitus* appeared as his accuſer, and entered a proceſs in form, againſt *Socrates*. His accuſation conſiſted of two heads; the firſt was, that he did not admit the Gods acknowledged by the Republic, and introduced new divinities; the ſecond was, that he corrupted the Youth of Athens.

Never had accuſation ſo little probability or foundation as this. It was now forty years ſince Socrates had made it his profeſſion to inſtruct the *Athenian* Youths. He had advanced no opinion in ſecret, and in the dark. He had always obſerved the ſame conduct, and taught the ſame principles. Nothing therefore was ever leſs feaſible, and more void of all probability, than this accuſation.

He anſwered the accuſation, and proved his own innocence to a demonſtration. His air, his action, his viſage, expreſſed nothing of the accuſed; and all he ſpoke was with a noble aſſurance and greatneſs of ſoul. But in ſpite of all, his enemies were powerful and prevailed. The Judges condemned him to drink the hemlock, that is a doſe of poiſon, which was a puniſhment very much in uſe among them.

This ſentence did not ſhake the conſtancy of Socrates in the leaſt. I am going, ſaid he, addreſſing himſelf to his Judges, to ſuffer death by your order, to which nature had condemned me from the firſt moment of my birth. But my accuſers will ſuffer no leſs from infamy and injuſtice, by the decrees of truth. Did you expect

pect from me, that to extricate myſelf out of your hands, I ſhould have employed (according to cuſtom) flattery and pathetic expreſſions, and the timorous and creeping behaviour of a ſuppliant? But in tryals, as well as war, an honeſt man ought not to uſe all ſorts of means for the preſervation of his life. It is equally diſhonourable, both in the one and the other, to ranſom it only by prayers and tears, and all thoſe other abject methods you ſee every day practiſed by people in my preſent condition.

After the ſentence had been paſſed upon him, *Socrates* with the ſame intrepid aſpect, went forward toward the priſon. His friends followed him thither, and continued to viſit him during the thirty days, which paſſed between his condemnation and his death. The day before he drank the poiſon, *Crito* his intimate friend came to him early in the morning, to let him know that he had an opportunity to eſcape, that the jailor was gained, that he would find the doors open, and that he might have a ſafe retreat in *Theſſaly*. *Socrates* laughed at this propoſal, and aſked him, "*Whether he knew any place out of* Attica *where people did not die?*" His friend urged the thing to him very ſeriouſly, and preſſed him to take the advantage of ſo precious an opportunity, adding arguments upon arguments to induce his conſent, and engage him to reſolve upon his eſcape.

Socrates, after having heard him with attention, praiſed his zeal, and expreſſed his gratitude. He begged to be excuſed from complying with his deſign, becauſe it was his belief, that a man could not without a crime eſcape from juſtice and the laws. The next day all his friends (except *Plato* who was ſick) repaired to the priſon early in the morning. The jailor deſired them to wait a little, becauſe the Magiſtrates were at that time ſignifying to the priſoner, that he was to die that ſame day. Preſently after they entered, and found Socrates ſitting by *Xantippe* his wife, who held one of his children in her arms. As ſoon as ſhe perceived them, ſetting up a great cry, ſobbing and tearing her face and air, ſhe made the priſon reſound with her complaints. "Oh, my dear *Socrates*, your friends are come to ſee you, ſaid ſhe, for the laſt time." He deſired that ſhe might be taken away, and ſhe was immediately carried home.

Socrates paſſed the reſt of the day with his friends, and diſcourſed with them with his uſual chearfulneſs and tranquility. The ſubject of converſation was the moſt important and beſt adapted to the preſent conjuncture, that is to ſay, the immortality of the ſoul. What gave occaſion to this diſcourſe was a queſtion introduced in a manner by chance, whether a true Philoſopher ought not to deſire to die? this propoſition implyed an opinion that a Philoſopher could not die.

Socrates ſhews that nothing is more unjuſt than this notion, and that man, appertaining to God, who formed and placed him with his own hand in the poſt he poſſeſſes, cannot abandon that poſt, nor depart from life without his order. What is it then that can induce a Philoſopher to entertain this love for death? It can be only

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the hope of that happineſs he expects in another life, and that hope can be founded only upon the opinion of the Soul's immortality. Upon this great and important article *Socrates* employed the laſt day of his life, and entertained his friends with an admirable diſcourſe upon it. "My friends (ſaid he) there is ſtill one thing which it is very juſt to believe. If the ſoul be immortal, it requires to be cultivated with attention, not only for what we call the time of life, but for that which is to follow, I mean Eternity! and a neglect in this point may be attended with endleſs conſequences. If Death were the final diſſolution of being, the Wicked would be great gainers by it, by being delivered at once from their bodies, their ſouls, and their vices; but as the Soul is immortal, it has no other way of being freed from its evils, but in becoming very good and very wiſe; for it carries nothing away with it, but it's good or bad deeds, its virtues or vices, which are the cauſes of eternal happineſs or miſery.

When the dead are arrived at the fatal rendezvous of departed Souls, whither their Demon conducts them, they are all judged. Theſe who paſs their lives in a manner neither entirely criminal, nor abſolutely innocent, are ſent into a place where they ſuffer pains proportioned to their faults, till being purged and cleanſed of their guilt, and afterwards reſtored to liberty, they receive the reward of the good actions done in the body. Thoſe, who are judged to be incurable upon account of the greatneſs of their crimes who from deliberate will have committed ſacrileges and murders, and other ſuch great offences, the fatal deſtiny that paſſes judgment upon them hurls them into Tartarus, from whence they never depart. But thoſe who are guilty of crimes, great indeed, but worthy of pardon, who have committed violences in the tranſports of rage againſt their father or mother, or have killed ſome in a like emotion, and afterwards repented, theſe ſuffer the ſame puniſhment and in the ſame place with the laſt; but for a time only, till by their prayers and ſupplications they have obtained pardon from thoſe they have injured. But for thoſe who have paſſed through life with peculiar ſanctity, delivered from their baſe, earthly abodes, as from a priſon, they are received on high in a pure region, which they inhabit; and as philoſophy has ſufficiently purified them, they live without their bodies, through all eternity in a ſeries of joys and delights, it is not eaſy to deſcribe, and which the ſhortneſs of my time here on earth will not permit to enlarge upon.

In ſhort, he talked in ſuch a manner as ſhewed that he looked upon Death not as a violence done to him, but as a means beſtowed upon him of aſcending up to heaven. He declared that upon departing out of this life two ways are open to us; the one leads to the place of eternal miſery, ſuch ſouls as have ſullied themſelves here below in criminal pleaſures and ſhameful actions; the other conducts thoſe into happy manſions, who have retained their purity upon earth, and have lead in human bodies a life almoſt divine.

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When *Socrates* had done ſpeaking, *Crito* and the reſt of his friends, deſired his laſt inſtructions in regard to his Children, and other affairs, that by executing them they might have the conſolation of doing him ſome pleaſure. "I ſhall recommend nothing to you this day, replied *Socrates*, more than I have always done, which is to take care of yourſelves. You cannot do yourſelves a greater ſervice, nor me and my family a greater pleaſure." *Crito* having aſked him afterward in what manner he thought fit to be buried, "As you pleaſe, ſaid *Socrates*, if you can lay hold of me, and I not eſcape out of your hands." At the ſame time looking upon his friends with a ſmile, "I can never perſuade this *Crito*, ſaid he, that *Socrates* is he who converſes with you, and diſpoſes the ſeveral parts of this diſcourſe. For he always imagines that I am what he is going to ſee dead in a little time. He confounds me with my carcaſe, and therefore aſks me how I would be interred." In finiſhing theſe Words he roſe up and went to bathe himſelf in a chamber adjoining. After he came out of the bath, his Children were brought to him, for he had three, two very little, and the other grown up. He ſpoke to them for ſome time, gave his orders to the women who took care of them, and then diſmiſſed them. Being returned into his chamber, he laid him down upon his bed.

The ſervant of the Magiſtrate entered at the ſame time, and having informed him that the time for drinking the Hemlock was come (which was at ſun-ſet) the ſervant was ſo much affected with ſorrow, that he turned his back and fell a weeping. "See, ſaid *Socrates*, the good heart of this man! Since my impriſonment he has often come to ſee me and converſe with me. He is more worthy than all his fellows. How heartily the poor man weeps for me!" The fatal Cup was brought. *Socrates* aſked, what it was neceſſary for him to do? Nothing more replied the ſervant, than as ſoon as you have drank off the draught, to walk about till you find your legs grow weary, and afterwards lie down upon your bed. He took the cup without any emotion or change in his colour or countenance, and regarding the man with a ſteady and aſſured look. "Well, ſaid he, what ſay you of this drink? May one make a libation of it?" (which was a ſort of drink-offering, and made by pouring a part of the liquor on the ground) Upon being told that there was only enough for one doſe, "I at leaſt, continued he, we may ſay our prayers to the gods; as it is our duty, and implore them to make our exit from this world, and our laſt ſtage happy; which is what I moſt ardently beg of them." After having ſpoke theſe words, he kept ſilence for ſome time, and then drank off the whole draught with an amazing tranquility, and a ſerenity of aſpect not to be expreſſed or conceived.

Till then his friends with great violence to themſelves had refrained from tears, but after he had drank the potion, they were no longer their own maſters, and wept abundantly. One of the company, by name *Apollodorus*, who had been in tears during almoſt

almoſt the whole converſation, began to raiſe great cries, and to lament with ſuch exceſſive grief, as pierced the hearts of all that were preſent. *Socrates* alone remained unmoved, and even reproved his friends, tho' with his uſual mildneſs of good nature. "What are you doing? ſaid he; I admire at you. What is become of your fortitude? Was it not for this I ſent away the women, that they might not fall into theſe weakneſſes? For I have always heard ſay, that we ought to die peaceably and bleſſing the gods. Be at eaſe, I beg you, and ſhew more conſtancy and reſolution." Thoſe words filled them with confuſion, and obliged them to reſtrain their tears. In the mean time he kept walking to and fro, and when he found his legs grow weary, he laid down upon his back as he had been directed. The poiſon then operated more and more. When *Socrates* found it began to gain upon his heart, uncovering his face, (which had been covered without doubt to prevent any thing from diſturbing him,) "*Crito*, ſaid he, (which were his laſt words) we owe a cock to *Æſculapius*; diſcharge that vow for me, and pray don't forget it." Soon after which he breathed his laſt. *Crito* went to his body, and cloſed his mouth and eyes. Such was the end of *Socrates* in the ſeventieth year of his age. And thus this wiſe, this illuminated, this religious man, with all his veneration and noble ſentiments in regard to the deity, is condemned as an impious man, without his accuſers being able to inſtance one ſingle avowed fact, or to produce any proof with the leaſt appearance of probability. *Cicero* ſays he could never read the deſcription of his death without tears.

The NATURAL HISTORY *continued from Page* 32.

THE work of providence for the ſecurity of one claſs of animals, againſt that power of deſtruction which is found in another, requires our particular attention. To the elephant and lion, who want ſwiftneſs, and a diſtinguiſhed ſcent to catch their prey, providence has given ſtrength to overcome. The wolf and fox want that ſtrength, but make it up by their cunning: And the hound and jackall, and others, which want both great ſtrength and ſpeed, are endowed with a ſmell, which, with perſeverance in the purſuit, overtakes the prey. Thus each claſs is poſſeſſed of one talent in perfection to procure ſubſiſtence, and to enable them to eſcape their natural enemy.

The night is the time for wild animals ſeeking their prey; in which the foreſts echo with a variety of different howlings. The lion roars like thunder; the tyger and leopard make a more ſhrill but more hideous noiſe; the jackall, who purſues by his ſcent, and hunts in company, or in packs of his own kind, only barks like a dog, and never ceaſes 'till the prey be run down.—It is alſo remarkable, that the barking of the jackalls in their chace has ſuch an innate effect upon the ſtrongeſt animals, that theſe commonly follow the hunt, where they hear this cry begun, and ſeize upon the prey, when the jackalls have hunted it down;

which gave rise to that vulgar notion of the jackall's being the lion's provider: whereas the truth is this; the jackall hunts for himself alone, but the lion takes his prey from him by force.

But as this cannot always be the case, it is to be observed, that the most usual methods with the larger animals is to crouch, and hide themselves in the track of some weaker animals, upon which they seize by surprize. In which way of getting their prey, the lion is said to spring twenty yards, and the tyger more. All these wild beasts devour their prey in a most voracious manner, often bones and all, and then return to their retreats, continuing inactive 'till the calls of hunger again excite their courage and industry. But as all their methods of pursuit are counteracted by their prey, with all the arts of evasion and caution, they frequently range without success, supporting a life of famine and fatigue for eight or ten days successively, nature having given them an amazing power of sustaining hunger for a long time. Neither do beasts of prey devour each other, except induced by the greatest degree of hunger: In which extremities, the weakest become food to the strongest. At other times, they all seek after the deer and the ox; and they first suck their blood, and then devour the carcass. Though there is great antipathy between the elephant and the tyger, the wolf and the dog, which never meet without certain death to the weaker side.

Nor are the weaker animals less sagacious in their efforts to escape destruction: some find protection in holes, in which nature has directed them to bury themselves: others trust to their swiftness; and those which have neither of these advantages generally herd together, and endeavour to defend themselves with their united force. And though the sheep is accounted the meekest and most defenceless of all other animals, they will make a resistance; the females falling into the center, and the males with their horns forming a ring round them. The badger, hedgehog, and mole, which feed on fruits, provide in summer provisions for the winter, by filling their holes with all sorts of plants, which enables them to lie concealed from frosts and the danger of ravenous beasts; and some of these holes are constructed with so much art, that would almost do honour to a human agent, most of them with two openings; one to favour an escape, if an enemy should enter by the other; and many creatures which herd together place a centinel upon the watch, and take this duty by turns, to give notice of an approaching enemy. The dwellings of the hare, and the various tricks of the fox to escape the hounds are as wonderful; and some animals have the power to raise or cast out such an intolerable stench, that no dog will follow them. These are the efforts of natural instinct for safety, and they are in general sufficient to repel the hostilities of instinct only: but no arts the wretched animal can use, are sufficient to repress the invasions of man. Whenever he spreads his dominion, terror seems to follow: all natural cunning ceases amongst the tenants of the plain; all their industry avails nothing.

THE

Queſt. 57. *Anſwered by Mr.* Tho. Barker *of* Wiſſet *in* Suffolk.

PUT x = whole ſum left, and a = 800. Then per Queſtion $\frac{2x}{5}+\frac{3x}{10}+\frac{x}{8}+\frac{x}{20}+\frac{x}{40}+\frac{x}{50}+a=x$.

Whence $x=\frac{a}{1-\frac{2}{5}-\frac{3}{10}-\frac{1}{8}-\frac{1}{20}-\frac{1}{40}-\frac{1}{50}}=\frac{a}{.08}=$ 10000l. the whole ſum left.

Conſequently { A's ſhare was 4000 l. / B's ditto 3000 / C's ditto 2050 } { D's ditto 500 l. / E's ditto 250 / and F's 200 } &c.

This Queſtion was alſo anſwered by Meſſ. Barns, Rotheram, Conditt, Edwards, Clerk, Probert, Waugh, Robbins, Salter, Rawle, Lakeland, Sewell, Smith, Rivers, T. Adams, Baxter, W. C. Noſſen, Husbands Moxon, Gough, Tarratt, T. Sadler *the Propoſer, and Miſs* Ley.

Queſt. 58. *Anſwered by Mr.* Iſaac Tarrat *of* Epſom.

THE neareſt ſquare to the 4th number is 3052009, whoſe root is 1747 = x. Then $y+z=7$ by the conditions of the queſtion; alſo by the firſt equation $1747+7+z=1764$, whence $z=10$, then $y=7-z$, which ſubſtituted in the ſecond, gives $1747z+70-10z=10492$.

$\therefore z=\frac{10422}{1737}=6$, and $y=1$. Conſequently Mr. *Rawle* was born January 6, 1747, at two in the morning, and is aged eighteen years.

The ſame anſwered by Meſſ. Barns, Rotheram, Conditt, Edwards, Clerk, Probert, Waugh, Robbins, Salter, Lakeland, Sewell, Barker, T. Adams, Baxter, W. C. Husbands, Gough, W. Rawle *the Propoſer and Miſs* Ley.

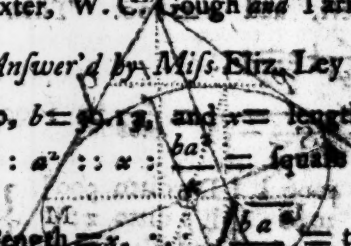
Queſt. 59. *Anſwered by Mr.* William Salter.

LET the required number be denoted by x, then per Queſtion $\frac{x-1}{2}$, $\frac{x-2}{3}$, $\frac{x-3}{4}$, $\frac{x-4}{5}$, $\frac{x-5}{6}$, $\frac{x-6}{7}$, $\frac{x-7}{8}$, and $\frac{x-8}{9}$ are whole numbers. Let $\frac{x-1}{2}=a$, then $x=2a+1$; this value of x put in the ſecond whole number, viz. $\frac{x-2}{3}$, it becomes $\frac{2a-1}{3}$, from the double of which take $\frac{3a}{3}$, the remainder, viz. $\frac{a-1}{3}=b$, a whole number; whence $a=3b+2$; which put for a in the above value of x, we have $x=6b+5$, this value of x put in the third whole number, viz. $\frac{x-3}{4}$ it becomes $\frac{6b+2}{4}=b+\frac{b+1}{2}$, which taken from $b+\frac{2b}{2}$, leaves $\frac{b-1}{2}=c$ a whole number, hence $b=2c+1$; which value of b, being put in the laſt value of x, we have $x=12c+11$. Thus proceeding thro' all the whole numbers we at laſt get $x=25200c+1519$. Therefore when $c=0$, then $x=1519$, the leaſt whole number poſſible that will anſwer all the conditions of the queſtion, as required.

The ſame anſwered by Meſſ. J. Adams, Barns, Edwards, Clerk, Probert.

bert, D. Waugh, Robbins, Lakeland, Rawle, Sewell, Smith, Barker, T. Adams, Baxter, W. C. Gough *and* Tarratt.

Queſt. 60. *Anſwer'd by Miſs* Eliz. Ley *of* Crediton, *the Propoſer.*



LET $a=60$, $b=39.13$, and $x=$ length of the required pendulum, then as $b : a^2 :: x : \frac{ba^2}{x} =$ ſquare of the vibrations of the pendulum whoſe length $=x$, $\therefore \sqrt{\frac{ba^2}{x}} =$ to the vibrations; by the data as $9 : 20 :: x : \frac{20x}{9}$, alſo $=$ vibrations; hence $\frac{20x}{9} = \sqrt{\frac{ba^2}{x}}$, and this ſquar'd becomes $\frac{400x^2}{81} = \frac{ba^2}{x}$, brought from fractions $=400x^3 = 81ba^2$; $\therefore x = \sqrt[3]{\frac{81ba^2}{400}} = 30.55$.

The ſame anſwered by Mr. B. Rotheram *of* Rotheram.

PUT $x=$ the length of the pendulum, $y=$ the number of vibrations in a minute; the length of the pendulums being as the ſquares of their vibrations. It will be $y^2 : 3600 :: 39.2 : \frac{141120}{y^2} = x$, but $\frac{9y}{2} = 20x$, therefore $\frac{9y}{2} = \frac{141120}{y^2}$; $y = \sqrt[3]{313600} = 67.939$, the vibrations in a minute, and $x = 30.57255$, the length of the pendulum.

The ſame likewiſe anſwered by Meſſ. Barnes, Conditt, Probert, Waugh, Robbins, Salter, Rawle, Sewell, Smith, Barker, T. Adams, Baxter *and* Tarratt.

Queſt. 61. *Anſwered by the Propoſer* Sangrado *jun.*

CONSTRUCTION.

UPon AB the given line deſcribe a ſegment of a circle to contain an angle equal to the given vertical angle, draw CE perpendicular to AB, and equal to the given perpendicular, draw CD making the angle ADC = the angle ACB, and it is done. ACD being the required Triangle.

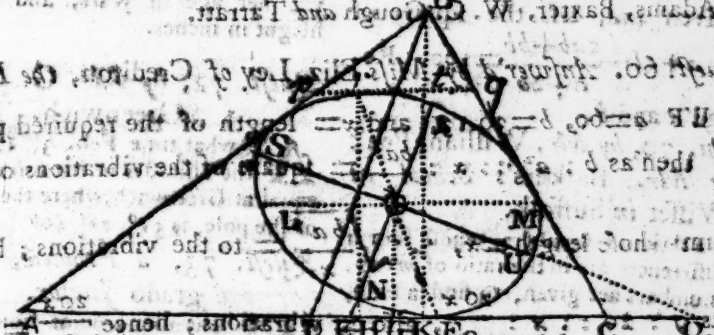
Dem. The Triangles ACB, ACD, are ſimilar, having the angle A common, the angles ACB, ADC equal (conſtr.) whence AB : AC :: AC : AD and AC = AB × AD. Q. E. D.

The ſame anſwered by Meſſ. Waugh, Barker, *and* Adams.

Queſt. 62. *Anſwer'd by Mr.* George Brown *the Propoſer.*

LET A B C repreſent the given triangle, viz. A C = 56, A B = 48, C B = 34, and B D the line biſecting A C in D, and parallel to I N per Queſt. in this Caſe, is the conjugate Diameters, where I N and L M are parallels, and B K, or H, and G A are perpendiculars to A C.

Put



Put $AD = DC = 28 = a$, $BD = \sqrt{946} = b$, $BK = 28.998773993171 = zb$, $DK = 10.25 = c$, $KC = q$, $DF = x$ and $Bt = x$. Then as $b : x :: a + x : rq = \frac{x}{b} \times a + x$, and $x \times FC = \overline{QM}^2 = \frac{x}{b} \times a^2 - x^2$; again as $b : b :: \frac{b-x}{2} : EQ = \frac{b}{2b} \times b - x$; $b : c :: \frac{b-x}{2} : EG = \frac{c}{2b} \times b - x$; $b : d :: x : tq = \frac{dx}{b}$, then will $rt = HK = \frac{x}{b} \times c + z$, $HC = d + \frac{x}{b} \times c + z$, $HF = \frac{x}{b} \times c + z - c + z$, $GE = \frac{x}{2b} \times c + z + \frac{c+z}{2}$ and $EF = \frac{z}{2b} \times b + x$; again, as $b : b :: EQ = \frac{b}{2b} \times b - x : EQ = \frac{b^2}{2cb} \times b - x$, Then $FQ = \frac{b}{2cb} \times b - x - \frac{z}{2b} \times b - x$, and $EF \times FQ = \overline{QM}^2 = \frac{b^2 z}{2cb^2} \times b^2 + x^2 - \frac{x^2}{4b^2} \times b + x = \frac{a^2}{b} \times a^2 - x^2$ or $x^2 - \frac{b^2 + 4bz}{c \times b - x} \times x = -\frac{4b^2 z}{b - x}$.

$x = \frac{b^2 \times b + x - \sqrt{b^4 \times b + x^2 - 16ba^2 z^2 x}}{2c \times b}$, put into Fluxions $\dot{x} = \frac{8ba^2 c\dot{x} \times b + x - 4b^2 bx\dot{x} \times b - x}{2 \times b - x^2 \times b^2 \times b + x - 2cx \times b - x}$; but per quest. $\frac{a^2 - x^2 \times x \times b - x^2}{a^2 - x^2 \times b^2 \times b + x - 2cx \times b - x^2} = \frac{x}{b}$ must be a maximum, put into Fluxions $\frac{8ba^2 c\dot{x} \times b + x - 4b^2 bx\dot{x} \times b - x}{2 \times b - x^2 \times b^2 \times b + x - 2cx \times b - x^2} = \frac{a^2 - x^2 \times b - 2x\dot{x}}{a^2 - x^2 \times b}$, put into numbers and solved $x = 7.508232$, and $x = 9.$ [illegible] $rt = 12.69000$, $x = 21$, $rF = 12.163317 = zr$, $OM = 5.+7.40827 = v$, transverse $Sll = 2s$, and conjugate $Bb = 2c$; zs and $zc = \sqrt{b^2 + a^2 + 2vr + r^2 + v^2 + n^2} - 2vr = 27.38451$ and 20.8407, the dimensions required. Q. E. I.

Mr. Ts Adams answered this Question,

Quest.

Queſt. 69, *by Miſs* Betſy Puzzlewit.

GIven $4aa$, leſs the ſquare of $4+2b-\frac{2ab+bb}{a+2b}$, $=109$. Required a and b.

Queſt. 70, *by Mr.* William Peak *at Mr.* Barkers's *School at* Wiſſet *in* Suffolk.

IN a ſeries of numbers, whoſe fourth differences are in the ratio of m to p, five numbers are given, to find a ſixth, &c.

Queſt. 71, *by Mr.* T. Barker *of* Wiſſett, Suffolk.

A Lovely maid, the pride of all the plain,
Whom many have ſtrove to win, but all in vain;
To me have yielded in Hymen's bands to tie,
When I her portion, age, and height deſcry,
From the equations, which below you'll ſee,
Therefore dear Gents pray lend your aid to me,
The ſame to ſolve, I may win the lovely dame,
And it ſhall be recorded in the Mag. of Fame.

Given $\begin{cases} x\sqrt{yz+y^2}=a=851.0625 \\ y\sqrt{xz+x^2}=b=4663 \\ z\sqrt{xy}+x^2=c=1158.0625 \end{cases}$

Here x denote her portion in hundreds $y=$ her age in years, and $z=$ her height in inches.

Queſt. 72, *by Mr.* G. Cetii *of* Greenwich.

AT what time Feb. 3. 1765, were the altitudes of the ſun and moon equal at Greenwich, where the elevation of the pole, is 51° 28′ 40″

Queſt. 73, *a Problem, by* Sangrado *Junior.*

TO determine a point from which if right lines be drawn to the three angular points of a given triangle, the ſum of their ſquares ſhall equal a given ſpace (aa); and if from the ſaid point lines be drawn to the three ſides of the triangle, making given angles therewith, the rectangle contained under the line drawn to the greater ſide, and a given line (b) ſhall be equal to the ſum of the rectangles under the other drawn lines and given lines (c, d).

Queſt. 74, *by Mr.* T. Allen *of* Spalding.

TO inveſtigate the ſum of the infinite ſeries.

$$\frac{1}{2.3-2+3}+\frac{1.2}{2.4.5.4+5}+\frac{1.3.5}{2.4.6.7.6+7}+\frac{1.3.5.7}{2.4.6.8.9.8+9}+\&c.$$

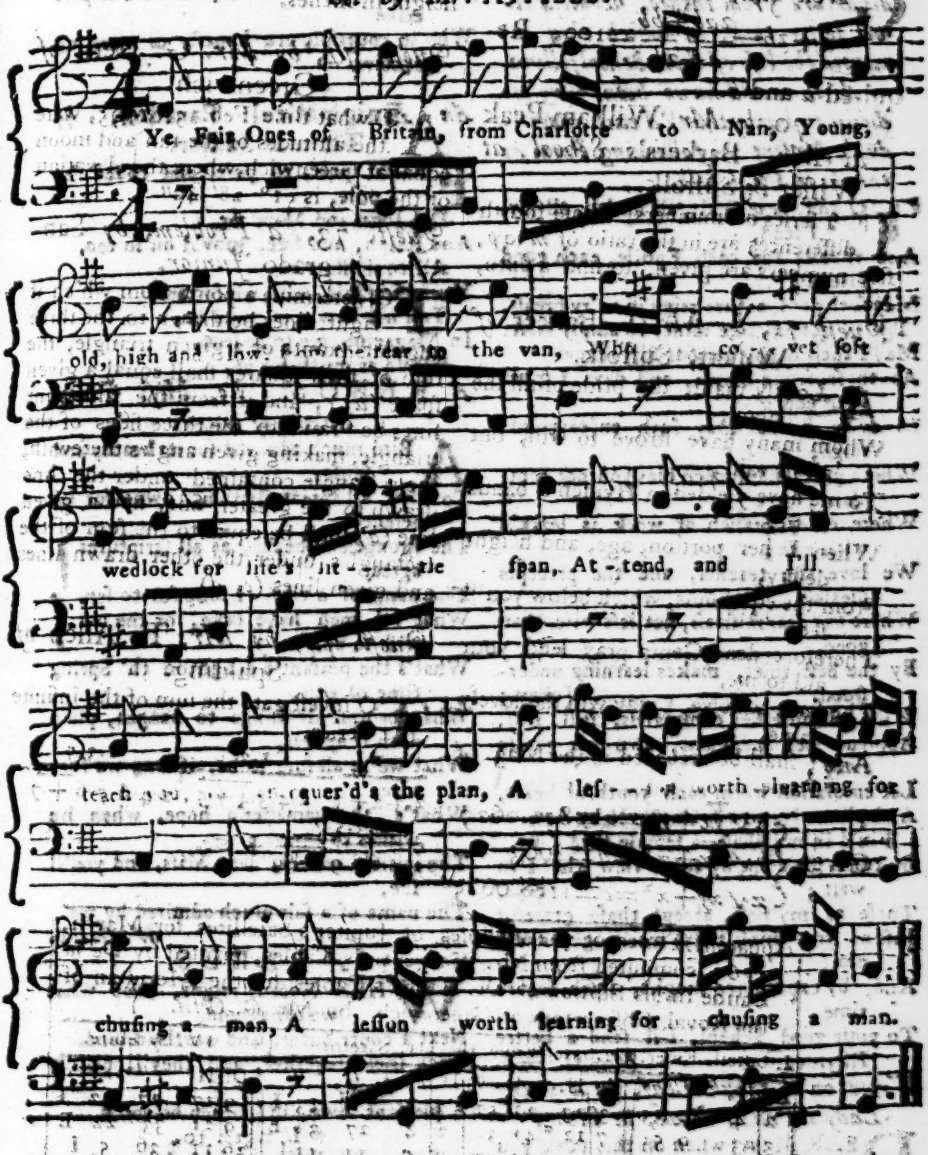
Apparent Times of the Eclipſes of Jupiter's Satellites for March, 1765, computed from Mr. Wargentin's Tables, printed by De la Lande in his Edition of Dr. Halley's Tables for the Meridian of the Royal Obſervatory at Greenwich, by Mr. *G. Cetii.*

I. Satell. Emer.			II. Satell. Emer.			III. Satellite			IV. Satellite.		
D.	H.	′	D.	H.	′	D.	H.	′	D.	H.	′
2	4	30 35	3	23	21 57	2	4	9 33 I	2	17	27 22 I
5	23	9 51	7	12 *	41 39	2	4	27 31 E	9	21	33 22 E
8	17	38 35	11	1	1 57	9	4	11 11 I	26	11 *	36 5 I
12	12 *	8 19	14	15	21 2	9	8 *	29 55 E	26	15	46 31 E
15	6 *	37 11	18	4	42 11	16	9 *	43 5 I			
19	1	6 47	21	18	2 21	16	12 *	32 36 E			
22	19	35 38	25	7 *	22 31	23	13 *	15 12 I			
26	14 *	4 55	28	20	42 42	23	16	35 10 E			
29	8 *	34 10				30	17	17 22 I			
	3	3 23				30	20	38 24 E			
	21	32 48									
	16 *	1 55									
	10 *	31 28									
	5	0 30									
	23	29 51									
	17	59 6									
	12 *	28 21									

These only which are marked with a * will be viſible at Greenwich.

MAN *for* WOMAN.

Set by Mr. ATTIEUD.



Beware of the Fop and the Petit Maitre,
With button and loop, and well powder'd hair,
Tho' he'll sigh & he'll sob, protest & declare
He loves & admires you beyond all the Fair,
He's in love with himself, so no love you can share.

Avoid the Platonic, shun the Ganymede,
One's known by grimace, and the other you'll read
By nature's strong lines on his visage decreed;
They've pettify'd hearts that ne'er flutter or bleed,
Your purse, not your person, is what they most need.

With him who in dress takes but decent delight,
Has wit and discretion to judge wrong from right,
Tho' he's tenderly rude, with him soon unite,
In Hymen's soft fetters, so trim and so light,
And revel in raptures all day and all night.

The

The Ladies of Buckingham Boarding-School, at Miss D—'s departure from thence, wrote a civil letter each, in which they lamented the loss of their School-fellow. —As it would have been very tedious to have thank'd each individual, she sent the following Poem as thanks to the whole.

TO you, dear Girls, all health, all joy, I send,
And thanks for each Epistle, each good Friend;
May such good-nature reign in ev'ry breast,
'Till ev'ry soul, like mine, be amply blest:
May I such happy periods still renew,
As those sweet hours, and days I spent with you:
In ev'ry School may such endearments reign,
Where great indulgence bids you not complain;
Where ev'ry branch of work is learn'd with ease;
We love the teacher, and the precepts please:
Where our dear mistress, not less wise, than good,
By the best rules, makes learning understood.
With pleasure her commands, still, still, obey;
Applaud her judgment, own her gentle sway,
Let emulation warm each youthful heart,
And plant Nature be improv'd by Art.
Fix'd in my chair, a female hard I sit,
By turns look up, by turns view what I've writ;
These as my first, accept these grateful lays,
Just as you think they merit, give them praise:
And, by experience taught, some future time,
To your good School, I'll send a better Rhyme. *M—D—ll.*

Wrote on a blank Leaf, in a young Lady's Prayer-Book, at Stowe.

DEAR Miss! when on this book you pray
That God will keep you all this day;
And preserve you from all evil,
From th' temptations of th' devil;
From hatred—pride—from malice free,
And last of all he'll give you me.

A Caution to unthinking Females.

ERE manhood is reach'd, the fond youth tells his tale,
To some list'ning damsel, in hopes to prevail;
As he ripens in years he with language evasive,
Uses ev'ry means, thro' experience persuasive,
To ruin the lass, who too late will discover,
She encourag'd a villain instead of a lover.
With professions so artful, 'tis hard to perceive
Who in courtship are honest, or mean to deceive.

An Ænigmatical Paradox, by Thomas Sadler.

FROM pole, to pole, and round the pole,
Did John and Mary fly,
And Ralph, and Sue, mov'd on so too,
All equidistantly.
Ye reasing fair, with wit so rare,
Tell me how this could be,
In Magazine, for to be seen,
I'll do as much for ye.

A REBUS. To Miss Polly Stow, of Stow.

A Bird much admired for its beauty and sense,
To what all Great-Britain, owns for its defence,
The strongest of beasts, as all scriptures agree;
The name of a city, I long for to see,
What all men have been, or the old wish to be,
What's the peasant's delight in th' Spring time of year,
What brings all things to naught, plain doth it appear,
What we're all sure to be, if long we survive,
What's the gamester's hope, when he wishes to thrive;
The initials collect, dear Miss, and you'll see,
The name of a fair much admired by me.
W. Gough.

A REBUS.

WHEN Noctus reigns, take what we oft attend,
Next a contributor, and worthy friend.
Tack these together, and they'll plainly show,
A pleasant town, in latitude below.*

* Lat. 52 : 10.

Answer to Rebus in last Magazine.

WITH sails spread amain, brave Hawke he did go
To battle Monsieur, and quill the proud foe;
Such hero's as these, by sea and by land,
Has made commerce flourish in Old England.

An Answer to the Ænigma and Rebus.

MORE swift then Weaver's Shuttle flies,
Brave Hawke his course does steer:
To shew the world we British boys,
Do never dread Monsieur.

ord Chief Justice
PRATT.

To the PUBLIC.

THERE are few more pleaſing ſenſations in the human breaſt, than thoſe which ariſe from an undiſguiſed confeſſion of truth. The authors of the GENERAL MAGAZINE, *influenced by that principle, beg leave to acquaint their readers, that their attempts to enlarge the compaſs of their work, and to procure additional encouragement, has not been ſo ſucceſsful as they could wiſh, on which account they find it inconſiſtent with that regard to their own intereſt which prudence dictates, to continue the work on an enlarged plan; and a regard to ther readers will not ſuffer them to purſue it in a contracted or inelegant manner: they have therefore determined to cloſe the publication of the General Magazine with the preſent number.*

Whilſt they feel a concern in thus withdrawing themſelves from their kind readers, they are glad to have it in their power to recommend a publication of the ſame kind, whoſe endeavours to excell have been more ſucceſsful: they therefore warmly recommend to all their preſent purchaſers THE UNIVERSAL MUSEUM and COMPLETE MAGAZINE, *which having the advantage of a very extenſive ſale, is enabled to furniſh a larger quantity, and a much more entertaining and uſeful variety, than the encouragement given to other magazines will ſuffer them to admit. The readers of the General Magazine will therein find a proper regard paid to the plan purſued in that magazine, particularly its mathematical friends and correſpondents may expect to ſee a continuance of that branch of ſcience.*

It is neceſſary however to caution the public to be very careful in ordering from their booksellers, whether in town or country, the UNIVERSAL MUSEUM and COMPLETE MAGAZINE, *which is dedicated to the Queen, otherwiſe they may be diſappointed in receiving it.*

As a ſpecimen of the work recommended, a liſt of the plates, and part of the contents of the three numbers publiſhed ſince the beginning of the year, is ſubjoined, ſo that any one may begin with taking the next number, which will be publiſhed the firſt of May, or from the commencement of the preſent year, as they ſhall think fit.

The MUSEUM for JANUARY 1765,

Is embelliſhed with the portraits of the late Lord HARDWICK, the Duke of DEVONSHIRE, PULTENEY earl of BATH, and Lord ANSON; a curious repreſentation of the ceremony obſerved in India of the wife's throwing herſelf into the flames after her deceaſed huſband; and a very extraordinary OAK now growing in the county of Weſtmoreland.

And contains, among many others, the following articles,

Debates in the Areopagus of Athens,—The Theatre,—Ibrahim and Almira, an eaſtern tale,—Solutions to the queries propoſed in our laſt,—New queries propoſed,—The advantages of tillage ſuperior to thoſe from dung,—A method of preventing a wheat crop on lightiſh land from being winter-proud,—A method of preventing heated corn, or hay, from firing in the mow,—Some important hints relating to the revenue,—An account of a very large oak-tree, in the foreſt of Clifton Moor, in Weſtmoreland,—Memoirs of the life of William Pultney, earl of Bath,—Of Philip Yorke, earl

of Hardwicke,—Of the Cavendiſh family, and particularly of the late duke of Devonſhire,—Account of the Hindoo's, or Heathens, which inhabit the empire of the Great Mogul in the Eaſt Indies.—Some account of John Weſkett, late porter to the earl of Harrington,—On the ſtudy of nature,—The natural hiſtory, geography, and preſent ſtate of England,—A ſpecimen of Triſtram Shandy,—Of behaviour in company,—The Hermit in town. An eaſtern tale,—Poetry,—Foreign affairs, and domeſtic occurrences.

For FEBRUARY,

Is embelliſhed with a well-engraved print of JAMES WOODHOUSE, the *poetical cobler*, being a humorous repreſentation of the manner in which he wrote his poems whilſt at work; alſo with an accurate MAP of OXFORDSHIRE, with the new improvements to the preſent time; and a new SONG ſet to muſic.

And contains, among many others, the following articles,

The Theatre,—Debates in the Areopagus of Athens, concerning the taxation of their Ionian colonies,—Anſwers to the queries propoſed in our laſt,—Humorous liſt of books and pamphlets, for the year 1764,—The life of Pythagoras,—The life of Diogenes,—The life of Mr. Bayle.—Story of Sophroniſba and Haynefia,—An account of the inhabitants of Penſylvania, and the variety of nations and religions ſettled there,—A deſcription of the city of Philadelphia,—Of eloquence,—An Allegory from the Zendaveſta of Zoroaſter,—Remarks on rolling land,—Obſervations on the properties and effects of Nitre,—The remarkable hiſtory of the Chevalier Bayard,—The natural hiſtory, geography, and preſent ſtate of England, continued,—Some account of James Woodhouſe, the poetical cobler,—Poetry,—Foreign and domeſtic occurrences.

For MARCH,

Is embelliſhed with a very elegant Copy of Mr. PINE's One hundred pounds premium picture of the SURRENDER of CALAIS to Edward III. very finely engraved; and an exact repreſentation of the famous Chineſe plant called GIN-SENG, neatly engraved.

And contains, among many others, the following articles,

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THE

THE GENERAL MAGAZINE OF ARTS and SCIENCES.

On the ORIGIN *and* PROGRESS *of the* ENGLISH THEATRE.

IT is well known that dramatic poetry in this and moſt other nations of Europe owes its origin, or at leaſt its revival, to thoſe religious ſhews, which in the dark ages were uſually exhibited on the more ſolemn feſtivals. At thoſe times they were wont to repreſent in the churches the lives and miracles of the ſaints, or ſome of the more important ſtories of ſcripture. And as the moſt myſterious ſubjects were frequently choſen, ſuch as the Incarnation, Paſſion, and Reſurrection of Chriſt, &c. thoſe exhibitions acquired the general name of *Myſteries*. At firſt they were probably a kind of dumb ſhews, intermingled, it may be, with a few ſhort ſpeeches; at length they grew into a regular ſeries of connected dialogues, formerly divided into acts and ſcenes. Specimens of theſe in their moſt improved State (being at beſt but poor artleſs compoſitions) may be ſeen amongſt Dodſley's *Old Plays* and in Oſborne's *Harleyan Miſcel.* How they were exhibited in their moſt ſimple form, we may learn from an ancient novel (often quoted by our old dramatic poets) intitled . . . . A merye Jeſt of a Man that was called Howleglaſs, &c. being a tranſlation from the Dutch language, in which he is named Ulenſpiegle. Howleglaſs, whoſe waggiſh tricks are the ſubject of this book, after many adventures, comes to live with a prieſt, who makes him his pariſh clerk. This prieſt is deſcribed as keeping a *leman*, or concubine, who had but one eye, to whom Howleglaſs owed a grudge for revealing his rogueries to his maſter. The ſtory thus proceeds, . . . 'And than in the meane ſeaſon, while Howleglaſs 'was paryſhe clarke, at Eaſter they ſhould play the Reſurrection of 'our Lord: and for becauſe than the men wer not learned, nor 'could not read, the prieſt toke his leman, and put her in the grave 'for an Aungell: and this ſeeing Howleglaſs, toke to hym iij of the 'ſympleſt perſons that were in the towne, that played the iij Maries; 'and the Perſon [i. e. Parſon or Rector] played Chriſte, with a 'baner in his hand. Than ſaide Howleglaſs to the ſymple perſons, 'When the Aungell aſketh you whom you ſeke, you may ſay, The 'parſons leman with one iye. Than it fortuned that the tyme was 'come that they muſt playe; and the Aungell aſked them whom

'they sought, and than said they, as Howleglas had shewed and 'learned them afore, and than answered they, We seke the priestes 'leman with one ye. And then the priest might hear that he was 'mocked. And when the priestes leman heard that, she arose out 'of the grave, and would have smyten with her fist Howleglas upon 'the cheke, but she missed him and smote one of the symple 'persons that plared one of the three Maires; and he gave her 'another, and then toke she him by the heare [hair]; and that 'seeing his wyfe came running hastely to smite the priestes leman; 'and than the priest seeing this, cast down hys banner, and went to 'helpe his woman, so that the one gave the other sore strokes, and 'made great noyse in the churche. And then Howleglas seyng 'them lyinge together by the eares in the bodi of the churche, 'went his way out of the village, and came no more there.'

As the old Mysteries frequently required the representation of some allegorical personage, such as Death, Sin, Charity, Faith, and the like, by degrees the rude poets of those unlettered ages began to form compleat dramatic pieces consisting entirely of such personifications. These they intitled *Moral Plays*, or *Moralities*. The Mysteries were very inartificial, representing the scripture stories simply according to the letter. But the Moralities are not devoid of invention; they exhibit outlines of the dramatic art; they contain something of a fable or plot, and even attempt to delineate characters and manners.

But though the English Plays of these times were so extremely rude, yet still there remain some Latin plays written by the monks of those obscure times, with a greater share of taste than some readers would be apt to believe; and it is probable that these Latin productions were the original models of our plays in England, as we are certain they were in France, where a law was made in the time of Charlemagne that sacred representations should be only in the language of the vulgar. Contrary to this, our author seems not acquainted with any Plays under the name of Tragedy and Comedy before the reign of Henry VIII. but we may venture to affirm the contrary, and we refer him to Tanner's Bibliotheca Britannica Hibernica, for several instances in support of the assertion.

The old Mysteries, which ceased to be acted after the reformation, seem to have given rise to a third species of stage exhibition, which though now confounded with Tragedy or Comedy, were by our first dramatic writers considered as quite distinct from them both: these were Historical Plays, or *Histories*, a species of dramatic writing, which resembled the old Mysteries in representing a series of historical events simply in the order of time in which they happened, without any regard to the three great unities. These pieces seem to differ from Tragedy, just as much as Historical poems do from Epic; as the Pharsalia does from the Æneid. What might contribute to make dramatic poetry take this turn was, that soon after the Mysteries ceased to be exhibited, there was published a large collection of poetical narratives, called The Mirrour for Magistrates,

giſtrates, wherein a great number of the moſt eminent characters in Engliſh hiſtory are drawn relating their own misfortunes. This book was popular, and of a dramatic caſt, and therefore, as an elegant writer has well obſerved, might have its influence in producing Hiſtoric Plays. Theſe narratives probably furniſhed the ſubjects, and the ancient Myſteries ſuggeſted the plan.

That our old writers conſidered Hiſtorical Plays as ſomewhat diſtinct from Tragedy and Comedy, appears from numberleſs paſſages of their works. 'Of late days ſays Stow, inſtead of thoſe ſtage-playes have been uſed Comedies, Tragedies, Enterludes, and *Hiſtories* both true and fained.' Survey of London—Beaumont and Fletcher, in the prologue to The Captain, ſay,

" This is not Comedy, nor Tragedy,
" Nor *Hiſtory*."—

Polonius in Hamlet commends the actors, as the beſt in the world 'either for Tragedie, Comedie, *Hiſtorie*, Paſtoral,' &c. And Shakeſpeare's friends, Heminge and Condell, in the firſt folio edit. of his plays, in 1623, have not only intitled their book 'Mr. William Shakeſpear's Comedies, Hiſtories, and Tragedies:' but in their Table of Contents have arranged them under thoſe three ſeveral heads: placing in the claſs of *Hiſtories*, 'K. John, Richard II. Henry IV. 2 pts. Henry V. Henry VI. 3 pts. Richard III. and Henry VIII.'

This diſtinction deſerves the attention of the critics: for if it be the firſt canon of ſound criticiſm to examine any work by thoſe rules the author preſcribed for his obſervance, then we ought not to try Shakeſpear's *Hiſtories* by the general laws of Tragedy or Comedy. Whether the rule itſelf be vicious or not, is another inquiry: but certainly we ought to examine a work only by thoſe principles according to which it was compoſed. This would ſave a deal of impertinent criticiſm.

As we ever feel a pleaſure in being able to recommend uſeful attempts that ſerve either to enlarge the preſent compaſs of knowledge, or render the attainment more agreeable and expeditious, we here preſent our readers with an extract from a book juſt publiſhed, which poſſeſſes both theſe excellencies.

A Deſcription of the celebrated Cathedral of LORETTO, from the Beauties of Nature and Art diſplayed, in a Tour thro' the World, *in 14 pocket volumes.*

THE cathedral of Loretto is a moſt magnificent fabric, built in the form of a croſs, and adorned with a vaſt variety of ſtatues and paintings by the greateſt maſters. The cupola is a bold and lofty one, ſupported by twelve ſtately pillars, which are covered with paintings; and the doors of the church, which are ſaid to be of Corinthian braſs, are curiouſly wrought with baſs-reliefs, repreſenting ſeveral pieces of ſcripture hiſtory. But this church is moſt famous for the *Santa Caſa*, or *Holy Houſe*, which ſtands in the middle

middle of it, and occaſions a vaſt reſort of pilgrims from all parts of Europe. This houſe or apartment is about thirty feet long, and thirteen broad, and the walls appear to be of brick, cemented with common lime and ſand; but as to the roof and pavement, they are acknowledged to be of modern workmanſhip. At the weſt-end of it is a little window; and at the eaſt-end, over the chimney, is placed a cedar-ſtatue of the Virgin, holding the infant Jeſus on her right arm. The ſtatue is about four feet high, and uſually adorned with a mantle of gold brocade embroidered with precious ſtones; and on its breaſt hangs a rich fleece of jewels, with a collar and croſs of the ſame materials. But the moſt ſplendid and coſtly of all the virgin's array is her triple crown, which, with a little one for her child, was preſented to her by Lewis the Thirteenth of France. They are both of maſſy gold, and are enriched with diamonds, of immenſe value, which dazzle the eyes of the beholders. Round the niche, wherein the ſtatue is placed, a row of precious ſtones of different kinds is ſo diſpoſed as to form a ſort of rainbow of various colours. Twelve lamps of maſſy gold, ſaid to weigh thirty ſeven pounds each, hang before the ſtatue; and before the altar hangs one of a much larger ſize, remarkable for the excellency of the workmanſhip, which was a preſent from the Republic of Venice. This altar, which is of pure beaten ſilver, was preſented by one of the dukes of Toſcany.

As to the treaſury of this celebrated place, it is filled with riches ſurpaſſing all imagination. It is a long room or gallery, with a vaulted roof adorned with excellent paintings; on one ſide whereof are ſeventeen or eighteen large preſſes, with folding doors, the repoſitories of gold, diamonds, and whatever elſe is valuable, being the offerings of emperors, kings, princes, &c. for ſeveral ages paſt. Silver, as Mr. Addiſon obſerves, can ſcarce find admiſſion here, and gold looks but poorly among ſuch an incredible number of precious ſtones. It is ſurpriſing to view the coſtly ſervices for the altar, conſiſting of lapis lazuli, amber, agate, coral and chryſtal. In one preſs, there is a ſpread eagle covered with diamonds; in another, the images of our Saviour and the Samaritan woman in gold, and there is an altar-piece, enriched with jewels, valued at a hundred and forty thouſand crowns. In this treaſury are likewiſe kept the rich habits of the virgin, of which ſhe has a change at leaſt for every day in the year. But it would be endleſs to enumerate all the valuable curioſities that are heaped up here from all parts of Chriſtendom.

Human Life, or the Viſion of THEODORE, *the Hermit of* Teneriffe.

SON of perſeverance, whoever thou art, whoſe curioſity has led thee hither, read and be wiſe. He that now calls upon thee is *Theodore* the Hermit of *Teneriffe*, who in the fifty-ſeventh year of his retreat left this inſtruction to mankind, leſt his ſolitary hours ſhould be ſpent in vain.

I was once what thou art now, a groveller on the earth, and a gazer at the ſky. I trafficked and heaped wealth together, I loved

and

and was favoured, I wore the robe of honour, and heard the music of adulation; I was ambitious, and rose to greatness; I was unhappy, and retired. I sought for some time what I at length found here, a place where all real wants might be easily supplied, and where I might not be under the necessity of purchasing the assistance of men by the toleration of their follies. Here I saw fruits and herbs and water, and here determined to wait the hand of death, which I hope, when at last it comes, will fall lightly upon me.

Forty-eight years had I now passed in forgetfulness of all mortal cares, and without any inclination to wander farther than the necessity of procuring sustenance required; but as I stood one day beholding the rock that overhangs my cell, I found in myself a desire to climb it; and when I was on its top, was in the same manner determined to scale the next, till by degrees I conceived a wish to view the summit of the mountain, at the foot of which I had so long resided. This motion of my thoughts I endeavoured to suppress, not because it appeared criminal, but because it was new; and all change not evidently for the better, alarms a mind taught by experience to distrust itself. I was often afraid that my heart was deceiving me, that my impatience of confinement rose from some earthly passion, and that my ardour to survey the works of nature, was only a hidden longing to mingle once again in the scenes of life. I therefore endeavoured to settle my thoughts into their former state, but found their distraction every day greater. I was always reproaching myself with the want of happiness within my reach; and at last began to question whether it was not laziness rather than caution, that restrained me from climbing to the summit of *Teneriffe*.

I rose therefore before the day, and began my journey up the steep of the mountain; but I had not advanced far, old as I was and burthened with provisions, when the day began to shine upon me; the declivities grew more precipitous, and the sand slided from beneath my feet; at last, fainting with labour, I arrived at a small plain, almost inclosed by rocks, and open only to the east. I sat down to rest awhile, in full persuasion that when I had recovered my strength, I should proceed on my design; but when once I had tasted ease, I found many reasons against disturbing it. The branches spread a shade over my head, and the gales of spring wafted odours to my bosom.

As I sat thus forming alternately excuses for delay, and resolutions to go forward, an irresistible heaviness suddenly surprised me; I laid my head upon the bank and resigned myself to sleep: When methought I heard the sound as of the flight of eagles, and a being of more than human dignity stood before me. While I was deliberating how to address him, he took me by the hand with an air of kindness, and asked me solemnly, but without severity, 'Theodore, whither art thou going? I am climbing, answered I, to the top of the mountain, to enjoy a more extensive prospect of the works of nature. 'Attend first, said he, to the prospect which this 'place affords, and what thou dost not understand I will explain. 'I am one of the benevolent beings who watch over the children of

'the duſt, to preſerve them from thoſe evils which will not ultimately terminate in good, and which they do not, by their own faults, bring upon themſelves. Look round therefore without fear: Obſerve, contemplate, and be inſtructed.'

Encouraged by this aſſurance, I looked and beheld a mountain higher than *Teneriffe*, to the ſummit of which the human eye could never reach; when I had tired myſelf with gazing upon its height, I turned my eyes towards its foot, which I could eaſily diſcover, but was amazed to find it without foundation, and placed inconceivably in emptineſs and darkneſs. Thus I ſtood terrified and confuſed; above were tracts inſcrutable, and below was total vacuity. But my protector, with a voice of admonition, cried out, *Theodore*, be not affrighted, but raiſe thy eyes again; the *mountain* of *exiſtence* is before thee, ſurvey it and be wiſe.

I then looked with more deliberate attention, and obſerved the bottom of the mountain to be of gentle riſe, and overſpread with flowers; the middle to be more ſteep, embarraſſed with crags, and interrupted by precipices, over which hung branches loaded with fruits, and among which were ſcattered palaces and bowers. The tracts which my eye could reach neareſt the top were generally barren; but there were among the clefts of the rocks, a few hardy evergreens, which though they did not give much pleaſure to the ſight or ſmell, yet ſeemed to chear the labour and facilitate the ſteps of thoſe who were clambering among them.

Then beginning to examine more minutely the different parts, I obſerved at a great diſtance, a multitude of both ſexes iſſuing into view from the bottom of the mountain. Their firſt actions I could not accurately diſcern; but as they every moment approached nearer, I found that they amuſed themſelves with gathering flowers under the Superintendence of a modeſt virgin in a white robe, who ſeemed not over-ſolicitous to confine them to any ſettled pace, or certain track; for ſhe knew that the whole ground was ſmooth and ſolid, and that they could not eaſily be hurt or bewildered. When, as it often happened, they plucked a thiſtle for a flower, *Innocence*, ſo was ſhe called, would ſmile at the miſtake. Happy, ſaid I, are they who are under ſo gentle a government, and yet are ſafe. But I had no opportunity to dwell long on the conſideration of their felicity; for I found that *innocence* continued her attendance but a little way, and ſeemed to conſider only the flowery bottom of the mountain as her proper province. Thoſe whom ſhe abandoned ſcarcely knew that they were left, before they perceived themſelves in the hands of *education*, a nymph more ſevere in her aſpect and imperious in her commands, who confined them to certain paths, in their opinion, too narrow and too rough. Theſe they were continually ſolicited to leave by *appetite*, whom *education* could never fright away, though ſhe ſometimes awed her to ſuch Timidity, that the effects of her preſence were ſcarcely perceptible. Some went back to the firſt part of the mountain, and ſeemed deſirous of continuing buſied in plucking flowers, but were no longer guarded by *innocence*; and ſuch as *education* could not force back, proceeded up the mountain

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by ſome miry road, in which they were ſeldom ſeen, and ſcarcely ever regarded.

As *education* led her troop up the mountain, nothing was more obſervable than that ſhe was frequently giving them cautions to beware of *habits*; and was calling out to one or another at every ſtep, that a *habit* was enſnaring them; that they would be under the dominion of *habit* before they perceived their danger; and that thoſe whom a *habit* ſhould once ſubdue, had little hope of regaining their liberty.

Of this caution, ſo frequently repeated, I was very ſolicitous to know the reaſon, when my protector directed my regard to a troop of Pygmies, which appeared to walk ſilently before thoſe that were climbing the mountain, and each to ſmooth the way before her follower. I found that I had miſſed the notice of them before, both becauſe they were ſo minute as not eaſily to be diſcerned, and becauſe they grew every moment nearer in their colour to the objects with which they were ſurrounded. As the followers of *education* did not appear to be ſenſible of the preſence of theſe dangerous aſſociates, or, ridiculing their diminutive ſize, did not think it poſſible that human beings ſhould ever be brought into ſubjection by ſuch feeble enemies, they generally heard her precepts of vigilance with wonder; and, when they thought her eye withdrawn, treated them with contempt. Nor could I myſelf think her cautions ſo neceſſary as her frequent inculcation ſeemed to ſuppoſe, till I obſerved that each of theſe petty beings held ſecretly a chain in her hand, with which ſhe prepared to bind thoſe whom ſhe found within her power. Yet theſe *habits* under the eye of *education* went quietly forward, and ſeemed very little to increaſe in bulk or ſtrength; for though they were always willing to join with *appetite*, yet when *education* kept them apart from her, they would very punctually obey command, and make the narrow roads in which they were confined eaſier and ſmoother.

It was obſervable, that their ſtature was never at a ſtand, but continually growing or decreaſing, yet not always in the ſame proportions; nor could I forbear to expreſs my admiration, when I ſaw in how much leſs time they generally gained than loſt bulk. Though they grew ſlowly in the road of *education*, it might however be perceived that they grew; but if they once deviated at the call of *appetite*, their ſtature ſoon became gigantic, and their ſtrength was ſuch, that *education* pointed out to her tribe many that were led in chains by them, whom ſhe could never more reſcue from their ſlavery. She pointed them out, but with little effect; for all her pupils appeared confident of their own ſuperiority to the ſtrongeſt *habit*, and ſome ſeemed in ſecret to regret that they were hindered from following the triumph of *appetite*.

It was the peculiar artifice of *habit* not to ſuffer her power to be felt at firſt. Thoſe whom ſhe led, ſhe had the addreſs of appearing only to attend, but was continually doubling her chains upon her companions, which were ſo ſlender in themſelves, and ſo ſilently faſtened, that while the attention was engaged by other objects, they were not eaſily perceived. Each link grew tighter as it had been

longer worn, and when by continual additions they became ſo heavy as to be felt, they were very frequently too ſtrong to be broken.

When *education* had proceeded in this manner to the part of the mountain where the declivity began to grow craggy, ſhe reſigned her charge to two powers of ſuperior aſpect. The meaner of them appeared capable of preſiding in ſenates or governing nations, and yet watched the ſteps of the other with the moſt anxious attention, and was viſibly confounded and perplexed if ever ſhe ſuffered her regard to be drawn away. The other ſeemed to approve her ſubmiſſion as pleaſing, but with ſuch a condeſcenſion as plainly ſhewed that ſhe claimed it as due; and indeed ſo great was her dignity and ſweetneſs, that he who would not reverence, muſt not behold her.

"*Theodore*," ſaid my protector, "be fearleſs, and be wiſe; ap-"proach theſe powers, whoſe dominion extends to all the remain-"ing part of the *mountain* of *exiſtence*." I trembled, and ventured to addreſs the inferior nymph, whoſe eyes, though piercing and awful, I was not able to ſuſtain. "Bright power, ſaid I, by what-"ever name it is lawful to addreſs thee, tell me, thou who preſideſt "here, on what condition thy protection will be granted?" "It "will be granted, ſaid ſhe; only to obedience. I am *reaſon*, of all "ſubordinate beings the nobleſt and the greateſt; who, if thou "wilt receive my laws, will reward thee like the reſt of my vota-"ries, by conducting thee to *religion*." Charmed by her voice and aſpect, I profeſſed my readineſs to follow her. She then preſented me to her *miſtreſs*, who looked upon me with tenderneſs. I bowed before her, and ſhe ſmiled.

When *education* delivered up thoſe for whoſe happineſs ſhe had been ſo long ſolicitous, ſhe ſeemed to expect that they ſhould expreſs ſome gratitude for her care, or ſome regret at the loſs of that protection which ſhe had hitherto afforded them. But it was eaſy to diſcover, by the alacrity which broke out at her departure, that her preſence had been long diſpleaſing, and that ſhe had been teaching thoſe who felt in themſelves no want of inſtruction. They all agreed in rejoicing that they would no longer be ſubject to her caprices, or diſturbed by her documents, but ſhould be now under the direction only of *reaſon*, to whom they made no doubt of being able to recommend themſelves by a ſteady adherence to all her precepts. *Reaſon* counſelled them at their firſt entrance upon her province, to inliſt themſelves among the votaries of *religion*; and informed them, that if they truſted to her alone, they would find the ſame fate with her other admirers, whom ſhe had not been able to ſecure againſt *appetites* and *paſſions*, and who having been ſeized by *habits* in the regions of *deſire*, had been dragged away to the caverns of *deſpair*. Her admonition was vain, the greater number declared againſt any other direction, and doubted not but by her ſuperintendency they ſhould climb with ſafety up the *mountain* of *exiſtence*. "My power, ſaid *reaſon*, is to adviſe, not to compel; I have al-"ready told you the danger of your choice. The path ſeems now "plain and even, but there are aſperites and pitfalls, over which

"*religion*

" *religion* only can conduct you. Look upwards, and you perceive " a miſt before you ſettled upon the higheſt viſible part of the moun- " tain, a miſt by which my proſpect is terminated, and which is " pierced only by the Eyes of *Religion*. Beyond it are the temples " of *happineſs*, in which thoſe who climb the precipice by her di- " rection, after the toil of their pilgrimage repoſe for ever. I know " not the way, and therefore can only conduct you to a better guide. " *Pride* has ſometimes reproached me with the narrowneſs of my " view, but when ſhe endeavoured to extend it, could only ſhew " me, below the miſt, the bowers of *content*; even they vaniſhed " as I fixed my eyes upon them; and thoſe whom ſhe perſuaded to " travel towards them were inchanted by *habits*, and ingulfed by " *deſpair*, a cruel tyrant, whoſe caverns are beyond the darkneſs on " the right ſide and on the left, from whom priſons none can " eſcape, and whom I cannot teach you to avoid."

Such was the declaration of *reaſon* to thoſe who demanded her protection. Some that recollected the dictates of *education*, finding them now ſeconded by another authority, ſubmitted with reluctance to the ſtrict decree, and engaged themſelves among the followers of *religion*, who were diſtinguiſhed by the uniformity of their march, though many of them were women, and by their continual endeavours to move upwards, without appearing to regard the proſpects which at every ſtep courted their attention.

All thoſe who determined to follow either *reaſon* or *religion*, were continually importuned to forſake the road, ſometimes by *paſſions* and ſometimes by *appetites*, of whom both had reaſon to boaſt the ſucceſs of their artifices; for ſo many were drawn into by-baths, that any way was more populous than the right. The attacks of the *appetites* were more impetuous, thoſe of the *paſſions* longer continued. The *appetites* turned their followers directly from the true way, but the *paſſions* marched at firſt in a path nearly in the ſame direction with that of *reaſon* and *religion*; but deviated by ſlow degrees, till at laſt they entirely changed their courſe. *Appetite* drew aſide the dull, and *paſſion* the ſprightly. Of the *appetites*, *luſt* was the ſtrongeſt; and of the *paſſions*, *vanity*. The moſt powerful aſſault was to be feared, when a *paſſion* and an *appetite* joined their enticements; and the path of *reaſon* was beſt followed, when a paſſion called to one ſide, and an appetite to the other.

Theſe ſeducers had the greateſt ſucceſs upon the followers of *reaſon*, over whom they ſcarcely ever failed to prevail, except when they counteracted one another. They had not the ſame triumphs over the votaries of *religion*; for tho' they were often led aſide for a time, *religion* commonly recalled them by her emiſſary *conſcience*, before *habit* had time to enchain them. But they that profeſſed to obey *reaſon*, if once they forſook her ſeldom returned; for ſhe had no meſſenger to ſummon them but *pride*, who generally betrayed her confidence, and employed all her ſkill to ſupport *paſſion*; and if ever ſhe did her duty, was found unable to prevail, if *habit* had interpoſed.

I ſoon found that the great danger to the followers of *religion* was only from *habit*; every other power was eaſily reſiſted, nor did

they find any difficulty when they inadvertently quitted her, to find her again by the direction of *conſcience*, unleſs they had given time to *habit* to draw her chain behind them, and bar up the way by which they had wandered. Of ſome of thoſe the condition was juſtly to be pitied, who turned at every call of *conſcience*, and tried, but without effect, to burſt the chains of *habit*: Saw religion walking forward at a diſtance, ſaw her with reverence, and longed to join her; but were, whenever they approached her, with-held by *habit*, and languiſhed in ſordid bondage, which they could not eſcape, tho' they ſcorned and hated it.

It was evident that the *habits* were ſo far from growing weaker by theſe repeated conteſts, that if they were not totally overcome, every ſtruggle enlarged their bulk and increaſed their ſtrength; and a *habit* oppoſed and victorious was more than twice as ſtrong as before the conteſt. The manner in which thoſe who were weary of their tyranny endeavoured to eſcape from them, appeared by the event to be generally wrong; they tried to looſe their chains one by one, and to retreat by the ſame degrees as they advanced; but before the deliverance was completed, *habit* always threw new chains upon her fugitive: Nor did any eſcape her but thoſe who by an effort ſudden and violent, burſt their ſhackles at once, and left her at a diſtance; and even of theſe many ruſhing too precipitately forward, and hindered by their terrors from ſtopping where they were ſafe, were fatigued with their own vehemence, and reſigned themſelves again to that power from whom an eſcape muſt be ſo dearly bought, and whoſe tyranny was little felt, except when it was reſiſted.

Some however there always were, who, when they found *habit* prevailing over them, called upon *reaſon* or *religion* for aſſiſtance; each of them willingly came to the ſuccour of her ſuppliant; but neither with the ſame ſtrength, nor the ſame ſucceſs. *Habit*, inſolent with her power, would often preſume to parley with *reaſon*, and offer to looſe ſome of her chains if the reſt might remain. To this *reaſon*, who was never certain of victory, frequently conſented, but always found her conceſſion deſtructive, and ſaw the captive led away by *habit* to his former ſlavery. *Religion* never ſubmitted to treaty, but held out her hand with certainty of conqueſt; and if the captive to whom ſhe gave it did not quit his hold, always led him away in triumph, and placed him in the direct path to the temple of *happineſs*, where *reaſon* never failed to congratulate his deliverance, and encourage his adherence to that power to whoſe timely ſuccour he was indebted for it.

When the traveller was again placed in the road of *happineſs*, I ſaw *habit* again gliding before him, but reduced to the ſtature of a dwarf, without ſtrength and without activity; but when the *paſſions* or *appetites* which had before ſeduced him, made their approach, *habit* would on a ſudden ſtart into ſize, and with unexpected violence puſh him towards them. The wretch thus impelled on one ſide, and allured on the other, too frequently quitted the road of *happineſs*, to which, after his ſecond deviation from it, he rarely returned. But if by a timely call upon *religion*, the force of *habit* was eluded,

eluded, her attacks grew fainter, and at last her correspondence with the enemy was entirely destroyed. She then began to employ those restless faculties in compliance with the power which she could not overcome; and as she grew again in stature and in strength, cleared away the asperities of the road to *happiness*.

From this road I could not easily withdraw my attention, because all who travelled it appeared chearful and satisfied; and the farther they proceeded, the greater appeared their alacrity, and the stronger their conviction of the wisdom of their guide. Some who had never deviated but by short excursions, had *habit* in the middle of their passage, vigorously supporting them and driving off their *appetites* and *passions*, which attempted to interrupt their progress. Others, who had entered this road late, or had long forsaken it, were toiling on without her help at least, and commonly against her endeavours. But I observed, when they approached to the barren top, that few were able to proceed without some support from *habit*, and that those whose *habits* were strong advanced towards the mists with little emotion, and entered them at last with calmness and confidence; after which they were seen only by the eye of *religion*, and though *reason* looked after them with the most earnest curiosity, she could only obtain a faint glimpse, when her mistress, to enlarge her prospect, raised her from the ground. *Reason*, however, discerned that they were safe, but *Religion* saw that they were happy.

'Now, *Theodore*,' said my protector, 'withdraw thy view from the 'regions of obscurity, and see the fate of those who, when they 'were dismissed by *education*, would admit no direction but that of '*reason*. Survey their wanderings, and be wise.'

I looked then upon the road of *reason*, which was indeed, so far as it reached, the same with that of *religion*, nor had *reason* discovered it but by her instruction. Yet when she had once been taught it, she clearly saw that it was right; and *pride* had sometimes incited her to declare that she discovered it herself, and persuaded her to offer herself as a guide to *religion*, whom after many vain experiments she found it her highest privilege to follow. *Reason* was however at last well instructed in part of the way, and appeared to teach it with some success, when her precepts were not misrepresented by *passion*, or her influence overborne by *appetite*. But neither of these enemies was she able to resist. When *passion* seized upon her votaries, she seldom attempted opposition, she seemed indeed to contend with more vigour against *appetite*, but was generally overwearied in the contest; and if either of her opponents had confederated with *habit*, her authority was wholly at an end. When *habit* endeavoured to captivate the votaries of *religion*, she grew by slow degrees, and gave time to escape; but in seizing the unhappy followers of *reason*, she proceeded as one that had nothing to fear, and enlarged her size, and doubled her chains without intermission, and without reserve.

Of those who forsook the directions of *reason*, some were led aside by the whispers of *ambition*, who was perpetually pointing to stately palaces,

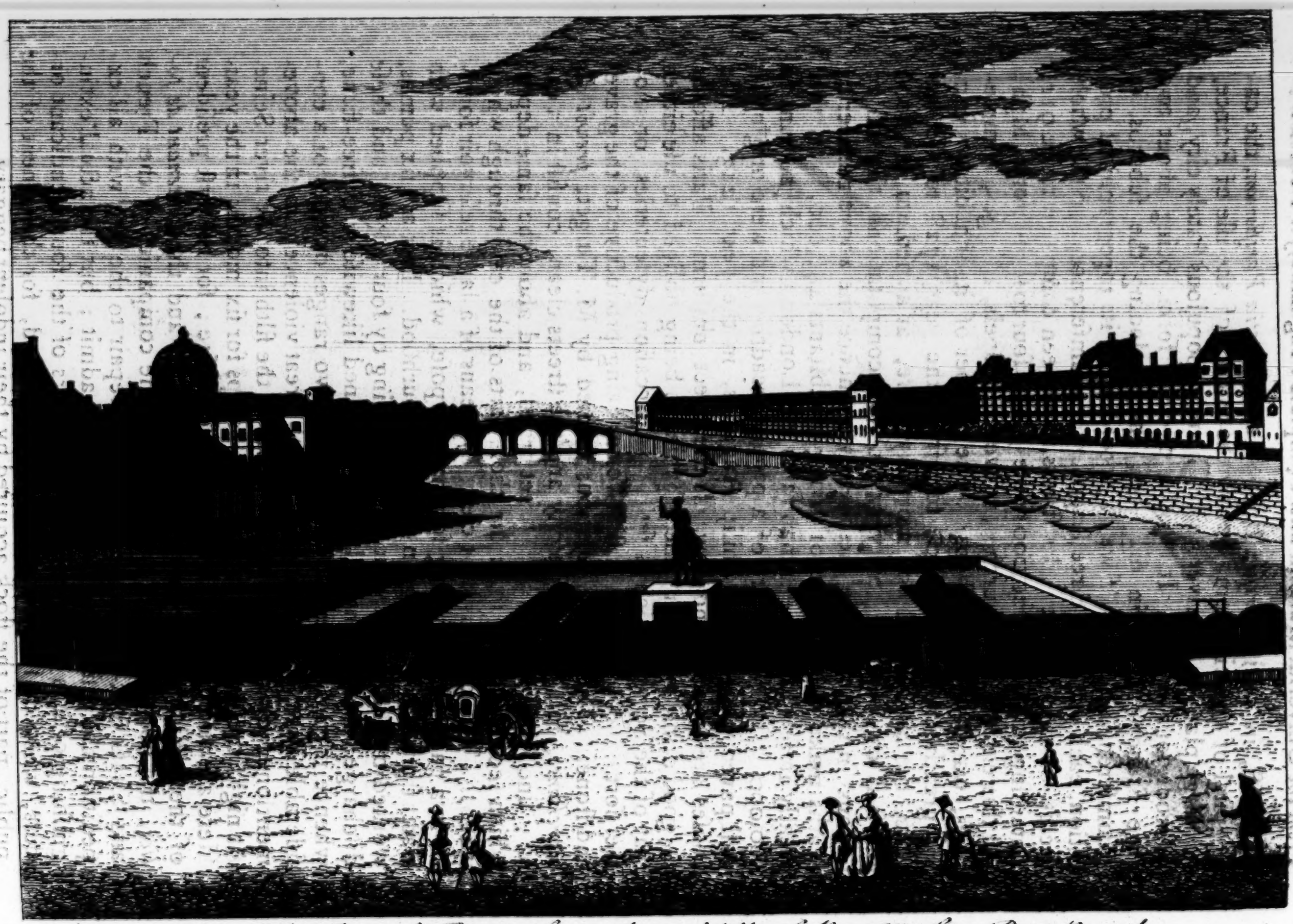
palaces, ſituated on eminences on either ſide, recounting the delights of affluence, and boaſting the ſecurity of power. They were eaſily perſuaded to follow her, and *habit* quickly threw her chains upon them; they were ſoon convinced of the folly of their choice, but few of them attempted to return. *Ambition* led them forward from precipice to precipice, where many fell and were ſeen no more. Thoſe that eſcaped, were, after a long ſeries of hazards, generally delivered over to *avarice*, and enliſted by her in the ſervice of *tyranny*, where they continued to heap up gold till their patrons or their heirs puſhed them headlong at laſt into the caverns of *deſpair*.

Others were inticed by *intemperance* to ramble in ſearch of thoſe fruits that hung over the rocks, and filled the air with their fragrance. I obſerved, that the *habits* which hovered about theſe ſoon grew to an enormous ſize, nor were there any who leſs attempted to return to *reaſon*, or ſooner ſunk into the gulphs that lay before them. When theſe firſt quitted the road, *reaſon* looked after them with a frown of contempt, but had little expectations of being able to reclaim them; for the bowl of intoxication was of ſuch qualities, as to make them loſe all regard but for the preſent moment; neither *hope* nor *fear*, could enter their retreats, and *habit* had ſo abſolute a power, that even *conſcience*, if *religion* had employed her in their favour, would not have been able to force an entrance.

There were others whoſe crime it was rather to neglect *reaſon* than to diſobey her, and who retreated from the heat and tumult of the way, not to the bowers of *intemperance*, but to the maze of *indolence*. They had this peculiarity in their condition, that they were always in ſight of the road of *reaſon*, always wiſhing for her preſence, and always reſolving to return to-morrow. In theſe was moſt eminently conſpicuous the ſubtlety of *habit*, who hung imperceptible ſhackles upon them, and was every moment leading them farther from the road, which they always imagined that they had the power of reaching. They wandering on from one double of the labyrinth to another with the chains of *habit* hanging ſecretly upon them, till as they advanced, the flowers grew paler, and the ſcents fainter; they proceeded in their dreary march without pleaſure in their progreſs, yet without power to return; and had this aggravation above all others, that they were criminal but not delighted. The drunkard for a time laughed over his wine; the ambitious man triumphed in the miſcarriage of his rival; but the captives of *indolence* had neither ſuperiority nor merriment. *Diſcontent* lowred in their looks, and *ſadneſs* hovered round their ſhades; yet they crawled on reluctant and gloomy, till they arrived at the depth of the receſs, varied only with poppies and nightſhade, where the dominion of *indolence* terminates, and the hopeleſs wanderer is delivered up to *melancholy*; the chains of *habit* are riveted for ever, and *melancholy* having tortured her priſoner for a time, conſigns him at laſt to the cruelty of *deſpair*.

While I was muſing on this miſerable ſcene, my protector called out to me, 'remember, *Theodore*, and be wiſe, and let not habit 'prevail againſt thee.' I ſtarted, and beheld myſelf ſurrounded by the rocks of *Teneriffe*; the birds of light were ſinging in the trees, and the glances of the morning darted upon me.

A Deſcription



A View of Paris from the middle of Pont Neuf to Pont Royal.

A Deſcription of the City of PARIS, *the Capital of* FRANCE; *with an elegant view of that part of the City from* PONT NEUF *to* PONT ROYAL.

From the Univerſal Muſeum and Complete Magazine, *for November.*

PARIS, in Latin *Pariſii*, *Lutetia*, and *Lutetia Pariſiorum*, the capital of the kingdom, lies in the middle of the iſle of France, in a large plain on the river Seine, being a populous ſtately city, and of prodigious extent. It is of a circular form, being about two large French * miles in diameter, and, including the ſuburbs, in circumference ſix; or, if we go according to its topographical projection, each quarter is three leagues in circumference, and the whole circuit of the city five. Its ſtreets have been computed to be 912, containing upwards of 20,000 houſes, from four to ſeven ſtories high; and this excluſive of churches, convents, chapels, colleges, communities, warehouſes and ſhops. The number of its inhabitants cannot greatly exceed 400,000; for, from the year 1728 to the year 1736, the annual bills of mortality were, at a medium, 17,800; and it is calculated, upon very probable computations, that of 25 perſons in this city one dies yearly; whence the above number of deaths make the number of living inhabitants 445,000, a number greatly imferior to the inhabitants of London; which amount to 700,000. The ſtreets are of a proper breadth, and were originally well paved with flint by Philip Auguſtus, in the year 1223. The houſes are ſightly, and towards the ſtreet uniform. Paris affords no good drinking-water, the inhabitants being obliged to uſe either that of the Seine, which is fetid, and occaſions dyſenteries, or another ſort of water which is ſtill worſe, being productive of the gravel and ſtone. The new regulations formed by M. Turget, *prevôt des marchants*, for keeping the city and the ſtreets clean, conſiſt in a canal, lined with free-ſtone, ſix feet broad, and about the ſame depth, which receives all the ſoil from thoſe parts of the city through which it runs. This canal is kept clean by means of a large reſervoir formed in a particular building for that purpoſe, which is ſupplied with water from all the ſprings in the neighbourhood. In it are ſix pumps, worked by a machine which is kept going by four horſes, and theſe diſcharge the water into a large baſon lined likewiſe with free-ſtone, whence it runs under ground through two ranges of pipes of a conſiderable bore, diſcharging itſelf with great violence into the abovementioned canal, and thus carries off all the filth into the river Seine. At night the ſtreets are lighted with lamps for ſix months in the year. Here are alſo good regulations in caſe of fire; for the firſt preſident of the parliament, the *prevôt des marchants*, and the *lieutenant de police*, the horſe and foot *patrole*, and ſome companies of the French and Swiſs foot-guards, are obliged to repair to the fire with all expedition the diſtance of the place will admit; but the actual extinguiſhing of it is in the care of the monks of the four mendicant orders, who, on ſuch occaſions, are to expend, for the benefit of the public, part of the ſtock acquired by their indolent beggary.

* Of the larger French miles, 20 make a degree of the equator; of the ſmaller, 25.

For

A View of Paris from the middle of Pont Neuf to Pont Royal.

For a general idea of this city and its curioſities, it muſt be obſerved, that Paris is the capital of the kingdom, the reſidence of an archbiſhop, of the principal parliament, of a chamber of accounts, of a court of taxes, of a court of mintage, of a ſupreme chamber of the tythes, of the court of the King's palace called *les requêtes de hôtel*, of two chambers of the *requêtes du palais*, of the office of the treaſurer of France, of a treaſury and demeſnes chamber, of the marble table, to which belong the court of the conſtable and mareſchal of France, of the admiralty, of the court of *des eax* and *des forets*, of a court-leet of the palace, of an election, of a particular foreſt-court, of the *bazoche*, or juriſdiction of the clergy, of the parliament, of the juriſdiction of the clergy, of the chamber of accounts, &c. all which ſeveral courts ſit in the *palais* on the iſland to which it gives name. Beſides theſe here alſo reſide the great council, which meets in the *hôtel d'Aligre* of the *chatelet*, which includes the court of the *prévôté*, and *precompté* of Paris, which the *le Siege preſidial*, a court for civil cauſes, a court of police and criminal cauſes, and other inferior courts.

In it are alſo forty-ſeven pariſh churches, beſides twenty others, three abbeys, and twelve priories for men, ſeven abbeys and ſix priories for women, ſeventeen collegiate churches, of which thirteen have chapters; fifty convents and fraternities of eccleſiaſtic, and laics, forty-three nuneries, fourteen female communities, eleven ſeminaries, twenty-ſix hoſpitals, and forty chapels, an univerſity with four faculties and forty-three colleges, excluſive of ſome others; ſix academies, beſides three others where young gentlemen are taught bodily exerciſes; five public libraries, excluſive of ſeveral private ones; four royal palaces, four caſtles, above one hundred hotels, ſome of them very ſtately; ſeventy-three market-places, ſixty fountains, twelve bridges over the Seine, ten of which are of ſtone, and eleven great gates.

Among its public buildings the *pont neuf*, or new bridge, is the principal, and, indeed, of all the bridges in Paris, being a very ſtately and beautiful fabric. It lies on the north-weſt parts of the iſland, and is carried over both the branches of the Seine, inſomuch that it joins this quarter of the city both with the univerſity and Saint Germain, and the quarters of St. Opportune and the Louvre. It was begun in the year 1578, and in 1604 finiſhed. It conſiſts of 12 arches, is one hundred and ſeventy toiſes in length, twelve broad, and has on it three diviſions; that in the middle is five toiſes broad, and is appointed for coaches and other carriages, on both ſides of which is a foot-paſſage raiſed two feet high: over the piles, on each ſide, are alſo ſemi-circular lodgments, occupied by one hundred and ſeventy-eight ſmall ſhops belonging to the King's footmen; but theſe obſtruct a moſt beautiful proſpect. In the centre of the bridge is a fine equeſtrian ſtatue of Henry IV. in braſs, bigger than the life, and ſtanding on a marble pedeſtal. On this bridge is alſo the building called *La Samaritaine*, in which is a pump, which through ſeveral pipes ſupplies the *quartier de Louvre*, and ſome others of the city with water.

The

The cathedral of Notre Dame, which is indeed of Gothick ſtructure, but is nevertheleſs large and ſtately, being ſixty-five toiſes long, twenty-four broad, and ſeventeen in height: on the inſide are four rows of pillars, thirty in a row, with forty-five chapels built betwixt the outermoſt rows and the wall. The pillars in the nave of the church are decorated with large, magnificent, beautiful pictures. The choir was ſplendidly repaired and beautified at the expence of ſome millions of livres by Lewis XIV. in purſuance of a vow of his father. Among the ſepulchral chapels in this church, thoſe of the Cardinals de Retz and Noailles are the moſt remarkable. The two ſquare towers belonging to it are thirty-four toiſes high, and flat at the top, with a baluſtrade of free-ſtone, whence we have a moſt grand proſpect of the whole city and the neighbouring country. In that on the left hand are two large bells, one of which weighs 31,000, and the other 40,000 pounds. In this church are performed the obſequies of perſons of the royal families, and likewiſe of the principal religious rights.

The Louvre, in Latin *Lupara*, is commonly divided into the old and new, though properly it is but one building. The old part of this royal palace was begun to be built of ſtone by Francis I. in the year 1528, and was finiſhed by Henry II. in 1548. Succeeding Kings improved and enlarged it till the time of Lewis XIV. who ordered it to be rebuilt on a new plan, which, if compleated, would have rendered it a moſt magnificent ſtructure, as appears from that part already built, though unfiniſhed. The plan of the whole building forms an equilateral quadrangle, containing a court in the centre ſixty-three toiſes ſquare. The principal of the four main wings was built by Lewis XIV. as alſo the greateſt part of the two others which form the ſides, together with a new front in that part lying next the Seine. The four inner fronts, it is ſaid, according to the plan, were to have conſiſted of eight pavilions and eight *corps de Logis*, ſupported by three rows of pillars; but there is no likelihood of its ever being finiſhed. In it, notwithſtanding, are ſeveral ſtately chambers. In the large gallery, in particular, which is two hundred and twenty-ſeven toiſes, or ſix hundred and eighty-one ells long, and joins this palace to that of the Tuilleries, are to be ſeen upwards of one hundred and eighty models of fortreſſes in France, and other countries, all formed with the utmoſt accuracy, and ſo natural as to repreſent the ſeveral cities therein deſcribed, with their ſtreets, houſes, ſquares, and churches, and likewiſe all their works, moats, bridges and rivers, together with the very country adjacent, ſuch as conſiſting of plains, mountains, corn-lands, meadows, gardens and woods. Some of theſe models may even be taken to pieces, that the curious may be the better enabled to perceive the admirable conſtruction of them. Lewis XIV. was the firſt who ordered theſe models to be conſtructed, and when any alterations are made in the fortreſſes, the alterations are alſo obſerved in theſe models, or new ones conſtructed with the moſt ſcrupulous conformity to the preſent ſtate of the place. In this palace is alſo the King's printing-houſe, and it contains likewiſe the moſt valuable collection of paintings.

The univerſity was founded by Charles the Fat, and conſiſts of four faculties, viz. divinity, the civil and canon law, phyſic, and the ſciences. Its head is the rector, who is always choſen from the faculty of the ſciences. This election is renewed every three months, yet many are known to enjoy that honour for ſeveral years. In public ſolemnities the rector takes place next to the princes of the blood, and at the King's funeral walks with the archbiſhop of Paris. He preſides in the convocation of the univerſity, and his counſellors are the deans of the faculties of divinity, law, and phyſic, with the *procuratores* of the four nations, of whom is compoſed the faculty of the ſciences. The univerſity court is conſtantly held on the firſt Saturday of every month, and likewiſe on occaſion of any miſunderſtanding betwixt the members of the univerſity; but the verdict is reported to the parliament. The patrons of the papal privileges of the univerſity are the biſhops of Beauvais, Senlis, and Meaux, one of whom it chuſes, who takes upon himſelf the full power in the Pope's name. The chancellor of the churches of the Notre Dame and S. Genevieve, by apoſtolic prerogative, have the privilege of creating a licentiate of the faculties, and of granting diplomas to teach in Paris, and elſewhere; but favours of this kind the chancellor of S. Genevieve uſually grants only in the faculty of philoſophy. The firſt of theſe faculties is the faculty of theology, which conſiſts of a great number of doctors, both ſecular and regular, who are diſperſed all over the kingdom, and even in foreign countries. The ſenior of the ſecular doctors, reſident at Paris, is dean of the faculty.

The palace of Orleans, or Luxembourg, is a magnificent ſtructure, and was rebuilt, in the ſpace of ſix years, by Mary de Medicis, ſecond wife to Henry IV. during her widowhood, though ſhe ended not her days here, but at Cologne, and that too in very great poverty. In its famous gallery are twenty exquiſite paintings by Rubens, of which, one piece, which ſymbolically repreſents the life of this Queen, is nine feet in breadth, and ten in length, yet this celebrated painter completely finiſhed them all in two years. The murder of Henry IV. is entirely omitted, and all we ſee relating to his death is Time carrying him up to heaven, where Jupiter and Hercules receive him into their arms. The garden belonging to this palace is large. In the *hotel des ambaſſadeurs*, the ambaſſadors extraordinary are entertained for three days; but thoſe of very remote countries reſide here all the time they ſtay at Paris. In the ſquare where the fair of St. Germain is held, are covered walks erected for the booths.

The *hôtel royal des invalides*, erected by Lewis XIV. for the relief of diſabled officers and ſoldiers. This incomparable foundation derives its æra from 1670, and the following year the ground was laid out for this ſpacious and ſtately ſtructure, and in eight years the whole was finiſhed. It lies on the borders of the country, not far from the Seine, and forms a regular quadrangle of ſeventeen acres. In it are five courts ſurrounded with lodgings three ſtories high, including the ground floor. The middle area is about four times as large as the others, and the buildings round it make a fine appearance. Here are alſo two rows of arched walks, over each other, forming

forming narrow galleries, by means of which one may go quite round the whole building. The ſtructures on the outſide are alſo decorated with trophies and all kinds of military embelliſhments. At the end of the court, directly oppoſite to the main entrance, is the inner door of the church. The inſide of theſe ſpacious buildings contain nothing remarkable, except a great number of chambers. Of the common ſoldiers, of which there are 3000, a certain number always live and ſleep in one ward; but the officers, who amount to about 500, live only three or four together. In a large hall here is held, every Thurſday, a meeting relating to the affairs of the hoſpital, in which the comptroller-general preſides. The infirmary *(les infirmaries)* is ſeparated by a court, and under excellent regulations. The church conſiſts of two parts; the inner one is for the uſe of the houſe; and the outer one, which is newly built, is both inſide and outſide, ſo very magnificent, as ſcarce to have its equal in the kingdom.

Of the OPERA *in* ENGLAND.

THE riſe and fall of our amuſements pretty much reſembles that of empire. They this day flouriſh without any viſible cauſe for ſuch vigour; the next they decay away, without any reaſon that can be aſſigned for their downfall. Some years ago the Italian opera was the only faſhionable amuſement among our nobility. The managers of the playhouſes dreaded it as a mortal enemy, and our very poets liſted themſelves in the oppoſition; at preſent, the houſe ſeems deſerted, the caſtrati ſing to empty benches.

To ſay the truth, the opera, as it is conducted among us, is but a very humdrum amuſement; in other countries, the decorations are entirely magnificent, the ſingers all excellent, and the burlettas or interludes quite entertaining; the beſt poets compoſe the words, and the beſt maſters the muſic, but with us it is otherwiſe; the decorations are but trifling and cheap; the ſingers, Manſoli only excepted, but indifferent. Inſtead of interlude, we have thoſe ſorts of ſkipping dances, which are calculated for the galleries of the theatre. Every performer ſings his favourite ſong, and the muſic is only a medly of old Italian airs, or ſome meagre modern Capricio.

When ſuch is the caſe, it is not much to be wondered, if the Opera is pretty much neglected; the lower orders of people have neither taſte nor fortune to reliſh ſuch an entertainment; they would find more ſatisfaction in the *Roaſt Beef of Old England*, than in the ſweet cloſes of an eunuch; they ſleep amidſt all the agony of recitative. On the other hand, people of fortune or taſte, can hardly be pleaſed where there is a viſible poverty in the decorations, and an entire want of taſte in the compoſition.

Would it not ſurprize one, that when Metaſtatio is ſo well known in England, and ſo univerſally admired, the manager or compoſer ſhould have recourſe to any other operas than thoſe written by him. I might venture to ſay, that, *written by Metaſtatio*, put up in the

bills of the day, would alone be ſufficient to fill an houſe, ſince thus, the admirers of ſenſe, as well as ſound, might find entertainment. The performers alſo ſhould be entreated to ſing only their parts, without clapping in any of their own favourite airs. I muſt own that ſuch ſongs are generally to me the moſt diſagreeable in the world. Every ſinger generally chuſes a favourite air, not from the excellency of the muſic, but from the difficulty; ſuch ſongs are generally choſen to ſurpriſe rather than pleaſe, where the performer may ſhew his compaſs, his breath, and his volubility.

From hence proceed thoſe unnatural ſtartings, thoſe unmuſical cloſings and ſhakes lengthen'd out to a painful continuance; ſuch, indeed, may ſhew a voice, but it muſt give a truly delicate ear the utmoſt uneaſineſs. Such tricks are not muſic; neither Corelli nor Pergoleſi ever permitted them, and they begin even to be diſcontinued in Italy, where they firſt had their riſe.

And now I am upon the ſubject: Our compoſers alſo ſhould affect greater ſimplicity, let their baſe cliff have all the variety they can give it; let the body of the muſic (if I may ſo expreſs it) be as various as they pleaſe, but let them avoid ornamenting a barren ground work; let them not attempt by flouriſhing, to cheat us of ſolid harmony.

The works of Mr. Rameau are never heard without a ſurpriſing effect. I can attribute it only to the ſimplicity he every where obſerves, inſomuch that ſome of his fineſt harmonies are often only octave and uniſon. This ſimple manner has greater powers than is generally imagined; and were not ſuch a demonſtration miſplaced, I think, from the principles of muſic, it might be proved to be moſt agreeable.

But to leave general reflection. With the preſent ſet of performers, the operas, if the conductor thinks proper, may be carried on with ſome ſucceſs, ſince they have all ſome merit; if not as actors, at leaſt as ſingers. Signora Matei is at once both a perfect actreſs and a very fine ſinger. She is poſſeſſed of a fine ſenſibility in her manner, and ſeldom indulges thoſe extravagant and unmuſical flights of voice complained of before. Cornacini on the other hand, is a very indifferent actor; has a moſt unmeaning face; ſeems not to feel his part; is infected with a paſſion of ſhewing his compaſs; but to recompence all theſe defects, his voice is melodious; he has vaſt compaſs and great volubility; his ſwell and ſhake are perfectly fine, unleſs that he continues the latter too long. In ſhort, whatever the defects of his action may be, they are amply recompenced by his excellency as a ſinger; nor can I avoid fancying that he might make a much greater figure in an oratorio, than upon the ſtage.

However, upon the whole, I know not whether ever operas can be kept up in England; they ſeem to be entirely exotic, and require the niceſt management and care. Inſtead of this, the care of them is aſſigned to men unacquainted with the genius and diſpoſition of the people they would amuſe, and whoſe only motives are immediate gain.

gain. Whether a diſcontinuance of ſuch entertainment would be more to the loſs or the advantage of the nation, I will not take upon me to to determine, ſince it is as much our intereſt to induce foreigners of taſte among us on the one hand, as it is to diſcourage thoſe trifling members of ſociety, who generally compoſe the operatical *dramatis perſonæ* on the other.

NATURAL HISTORY, *continued from page* 90.

HAVING already treated of the animal world, and given the diſtinguiſhing properties and peculiar inſtincts of each animal, we ſhall now preſent our readers with ſome of the moſt common appearances of nature, by which he will be ſurpriſed to find them poſſeſs'd of properties very diſtinct from their apparent tendency.

It is difficult to ſay what is the real nature and eſſence of fire, and the enquiry would be too abſtruſe for general comprehenſion; but ſome of its properties and effects may be readily deſcribed, and eaſily underſtood. One effect, and that which moſt particularly diſtinguiſhes it, is heat. Another is motion, which it communicates to all bodies; nay, ſome ſuppoſe, that all the motion in nature proceeds only from fire, which reſides more or leſs in all bodies whatſoever, and that if this fire could be extracted and taken quite away, all nature would grow into one ſolid body, hard and immoveable. Another effect of fire is, that it dilates all ſolid bodies, and rarifies all fluids. It melts, calcines, or vitrifies, according to the nature of the body that is offered to its power. It is thought by ſome to be the cauſe of light, but this is doubtful. It is certain there may be fire without light, as in a *Dutch* ſtove, which warms a room without enlightening it; and there may be light without fire, as the light of the moon, which gives no heat at all. In ſhort, the air we breathe, the water we drink, the earth from whence we draw our food, are all enlivened and rendered fit for the uſe of man by this warm principle reſiding in them.

Air is that thin tranſparent fluid in which we live, and move, and breathe; and without which we cannot ſubſiſt. It ſurrounds this terraqueous globe to a certain height, and is called its atmoſphere, is carried along with it, and partakes of all its motions both annual and diurnal. In this atmoſphere the clouds and vapours which are exhaled from the earth, are ſuſpended and float about. It is a compreſſible and dilatable body; that is, it may be contracted to a ſmaller ſpace than it naturally fills, or extended to a larger, as may be proved by many experiments. It is fitted by its nature to penetrate and pervade other bodies, by which means it animates and excites all nature, and is one of the principal cauſes of vegetation. It is the breath and life of the whole animal world, whether inhabiting the air, the earth, or the waters. It would be tedious to reckon up all the benefits of this uſeful and delicate element; let it ſuffice juſt to mention its wonderful power in many uſeful engines; its admirable property of conveying ſmells to our noſe, ſounds to our

our ears, and reflecting the light of the heavenly bodies to our eyes; alſo its great uſe and excellence in contributing by many other ways to the life, the health, the pleaſure of all mankind.

WATER is a clear ſimple fluid, inherent more or leſs in all matter whatſoever. There is not a body in all nature but what will yield water. Sir *Iſaac Newton* affirms, that all birds, beaſts, fiſhes, inſects, trees, and vegetables, with their ſeveral parts, grow out of water, watery tinctures and ſalts, and by putrefaction, return again to watery ſubſtances. Hartſhorn, after being kept forty years, and turned ſo hard and dry, that being ſtruck againſt a flint it will yield ſparks of fire; yet put into a veſſel and diſtilled, affords one eighth part of its quantity in water. Dead bones, after being dry'd 25 years, will yield by diſtillation half their weight in water. It is the moſt ſubtle and penetrating of all things except fire; it will paſs thro' pores ten times ſmaller than air will do. Leather or a bladder will contain air, but water eaſily finds its way thro' them. Nay, it has been known to force its way, when ſufficiently preſſed, thro' a ſpherical veſſel of gold. *Thales* the *Mileſian*, and ſome other philoſophers believe, that water was the firſt principle of all things; and ſome have thought that *Moſes* himſelf was of the ſame opinion, ſince before any thing was created, he tells us, *The ſpirit of God moved upon the face of the waters.* The uſes of water, beſides the beauty it gives to the world in ſeas, rivers, lakes, and ponds, are many and various. It is perhaps the moſt pleaſant and healthful drink in the world; as a medicine, it is very efficacious in many diſeaſes; and as a bath, it conduces both to health and pleaſure. In fine, it is ſubſervient to human life in many and various ways, in all fermentations, and in diſſolving all bodies that we have occaſion to diſſolve. Alſo in the motion of mills, and many other engines and machines, its powers are wonderful and ſurpriſing.

WIND is a quick motion of the air flowing from one point or quarter of the earth to another, of which, tho' various conjectures have been made, the phyſical cauſe is not yet known. The winds are divided into, 1. *Perennial*, or ſuch as blow all the year the ſame way, of which the moſt remarkable is that betwixt the two tropics, blowing conſtantly at ſea from eaſt to weſt, and called the general trade-wind. 2. *Periodical*, or thoſe which conſtantly return at certain times. Such are the ſea and land breezes, which in the evening blow from ſea to land, and in the morning from land to ſea. Such alſo are the particular trade winds, which blow from the north to the equator in our ſummer, and from the ſouth pole to the equator in our winter. 3. *Variable*, or ſuch as blow now one way, and now another; are now high, now low, without any regularity either as to time or place, which is the caſe in moſt of the temperate climates in the world. The uſes of the wind are many and great. It is the common ſervant of mankind. The whole buſineſs of navigation is performed by its aſſiſtance. It is not only commiſſion'd to warm and cool us by turns, but alſo to keep our habitations clean and wholeſome, which office it performs by carrying away inviſibly every thing that might infect and corrupt the

air,

air, which if it was always at reſt, and unagitated by frequent gales and ſtorms, inſtead of refreſhing and animating would ſuffocate and poiſon all the world.

The CLOUDS are nothing but vapours raiſed from the waters, or from moiſt parts of the earth, partly by the ſolar, and partly by the ſubterraneous heat; which vapours being lighter than air, mount upwards, till having reach'd ſuch a region of the atmoſphere, as is of the ſame ſpecific gravity with themſelves, they are there ſuſpended. After a while the watery particles which were at firſt too thin to be perceived, are ſo condenſed by the cold of the ſuperior regions, as to render them opaque enough to reflect the light of the ſun, in which ſtate they are called clouds; and when their ſpecific gravity is ſo increaſed as to make them deſcend, it is then called rain. Theſe clouds are formed in the atmoſphere, at very different heights from the earth. When they are formed in the lower regions of the atmoſphere, the rain which falls from them is very ſmall. When they are formed higher, the bubbles falling within the ſphere of each others attraction, incorporate as they fall, and become large drops. If theſe bubbles, in their deſcent thro' the atmoſphere, meet with a region ſo cold as to freeze them, they condenſe into flakes of ſnow or hail. The uſes of the clouds are manifold: 1ſt, They afford a delightful and refreſhing ſhade from the heat of the ſun: *2dly*, They pour down thoſe fertile dews and ſhowers on all the vegetable tribe, to which they owe their health, their verdure, and their beauty: And *3dly*, It is thought by many that the fountains, ſprings, and rivers, which ſo beautifully adorn the earth, and ſerve ſo many uſeful purpoſes, derive their origin from hence.

An eaſy Method of raiſing Money for the Service of the State.

AS there is ſcarcely a neceſſary of life but what is taxed in the heavieſt manner, I have long wiſhed that at leaſt an equal impoſition was placed upon the luxuries of life alſo, and that a duty was laid upon our public amuſements, ſome way adequate to what is laid upon our raiment, and our food. I cannot but think that a tax ſubjecting our theatres to a nightly fine of 10 or 20*l.* as ſhould ſeem moſt expedient to the wiſdom of government, would be both equitable and commendable.

The principal plea which the directors of our playhouſes urge againſt this propoſal, is, that it would render them unable to exhibit the public entertainments with as much ſplendor as they are at preſent performed: Experience, which a celebrated City Orator judiciouſly calls the touchſtone of truth, however, ſufficiently proves the futility of ſuch an argument: the time has been, and is not yet out of many people's memory, who are fifty years of age, when we could ſee a Wilkes, a Cibber, a Booth, a Porter, and an Oldfield in one play, for leſs money than we now pay to ſee a number of Gentlemen and Ladies, who cut no very reputable figure in their characters; and yet, though the price of ſeeing a play was conſiderably leſs, ſtill the decorations of every performance were conducted

in

in a manner that throws the preſent Anno Domini at an incredible diſtance, in point both of taſte and magnificence.

Well, but (ſay our managers) the actors of *Wilkes* and *Cibber's* time did not receive half the Salaries which we now pay to inferior performers. Wilkes himſelf upon leaving Mr. Aſbury, the Dublin Manager, to engage at a London theatre, received but four pounds a week, and this was looked upon as a large ſum for a performer, even of his merit, in thoſe days; whereas we are obliged to give ten, twelve, and fourteen to ſeveral of ours, or elſe we might clap a bill upon our houſe, and let it to a Methodiſt preacher for a conventicle. Therefore as we have been all along obliged to raiſe the ſalaries of our actors, in proportion to the exigence of the times, and are at an expence ſo infinitely ſuperior to what both Wilkes and Cibber were ever at, there cannot be any propriety in the parallel; nor can it be ſuppoſed that we are in the leaſt able to pay the tax in diſpute. Our profits, in all probability, would not amount to near the ſum, and of courſe there would be a ſpeedy abolition of the Theatre.

Why, Gentlemen, tho' this mode of reaſoning is plauſible, 'tis neither concluſive nor juſt: If you pay greater prices to actors than the managers of Cibber's day, you are paid greater prices by the public. In Cibber's time the ſhilling gallery ſcarce brought in a ſix-pence to the managers; it was appropriated for the uſe of the footmen who were always admitted gratis; whereas it has frequently brought you from one to two hundred pounds a week. In Cibber's time the middle-gallery was but eighteen-pence;—you receive two ſhillings. In Cibber's time the pit was half a crown,—you are paid ſix-pence more by every body; and receive five ſhillings a head for the boxes, when in the good old Laureat's days we could get in for four.—Add to all this, that your theatres are larger by a great deal than the theatres of his time, and that dramatical repreſentations are followed with ten times the avidity by the public.—Theſe are facts, gentlemen managers of Drury-lane and Covent-garden, not to be controverted; if therefore you would argue juſtly, you muſt ballance your diſadvantages with your profits, and I am next to a certainty when this is done, that you will find yourſelves able to pay a much larger ſum than the propoſal in debate.—Why, Gentlemen, the mere circumſtance of the ſhilling gallery, I have been pretty well aſſured, amply makes up for whatever expence you are at ſuperior to the three celebrated managers, whoſe names I have mentioned on this occaſion; take care therefore, leſt by pleading a poverty you are ſtrangers to, you do not occaſion a ſtrict examination into the condition of your revenues, and ſhew a ſtill greater poſſibility of making the public diverſions ſtill more ſerviceable to the public.—And now for a little anecdote, all the way from Ruſſia, ſomething applicable to the preſent purpoſe.

Before the acceſſion of Peter the Great, the eccleſiaſtical power in Ruſſia was very formidable, but this wiſe prince having a ſtrong inclination to render the clergy as inſignificant as any other claſs of men in the empire, made uſe of the following expedient to gain his end.—

end.—He ordered all the religious houſes to ſupply him with an aid againſt a particular day; the Eccleſiaſtics, however, inſtead of complying, drew up a remonſtrance, begging to be excuſed; ſetting forth, that their poverty was extreme, and that one with another, they had ſcarcely fifteen rubles a piece throughout the whole year for their ſubſiſtance.—The politic emperor ſeemed to take compaſſion on their diſtreſs, and declaring it was much too little, ordered each double the ſum out of his exchequer, and ſeized all their eſtates into his own hands.—The ſtory needs no comment; ſuffice it, that Peter was no way a loſer by the artifice.

The managers of our Theatres, however, have one main argument to prevent the diminution of their revenues, and this is, that the propoſed tax will render them unable to entertain us with a pantomime or an opera. If there was no other reaſon in nature for the expediency of the meaſure, this, in itſelf, is to the laſt degree preſſing and unanſwerable. Let us lay the tax on if there is no other good conſequence to be looked for, but the baniſhment of theſe monſters which have been ſo long a diſgrace to the taſte and underſtanding of the kingdom. Let us lay it on to drive the ſwarm of Italian Caſtrata and French vagrants from the theatre, who thruſt themſelves in before our own natives, and loll in their gilded chariots, while many a deſerving Engliſhman finds it difficult to furniſh his family with bread. Shakeſpear and ſenſe will then be reſtored to the public, and the ſtage will be calculated for the laudable end of it's original inſtitution, namely, the correction of our vices, and the improvement of our underſtandings.

Your's, &c.

NED NETTLE.

Advice on the Education of Children.

MAY I venture here to lay down the greateſt, moſt important and moſt uſeful rule of education? It is this, not to gain time, but to loſe it. The generality of readers will be ſo good as to excuſe my paradoxes; there is an abſolute neceſſity for them in making reflections: and, ſay what you will, I had rather be remarkable for hunting after a paradox, than for being miſled by prejudice. The moſt critical interval of human life is that between the hour of our birth and twelve years of age. This is the time wherein vice and error take root, without our being poſſeſſed of any inſtrument to deſtroy them: and when the implement is found, they are ſo deeply grounded, that they are no longer to be eradicated. If children took a leap from their mother's breaſt, and at once arrived at the age of reaſon, the methods of education now uſually taken with them would be very proper; but according to the progreſs of nature they require thoſe which are very different. We ſhould not tamper with the mind, till it has acquired all its faculties: for it is impoſſible it ſhould perceive the light we hold out to it while it is blind; or that it ſhould purſue, over an immenſe plain

of ideas, that route which reaſon hath ſo ſlightly traced, as to be perceptible only to the ſharpeſt ſight.

The firſt part of education, therefore, ought to be purely negative. It conſiſts, neither in teaching virtue nor truth; but in guarding the heart from vice, and the mind from error. If you could be content to do nothing yourſelf, and could prevent any thing being done by others, if you could bring up your pupil healthy and robuſt to the age of twelve years, without his being able to diſtinguiſh his right hand from his left, the eyes of his underſtanding would be open to reaſon at your firſt leſſon; void both of habit and prejudice, his paſſions would not operate againſt your endeavours; and he would become under proper inſtructions the wiſeſt of men. It is thus, by attempting nothing in the beginning, you might produce a prodigy of education.

Take the road directly oppoſite to that which is in uſe, and you will almoſt always do right. As we think it not enough children ſhould be children, but it is expected they ſhould be maſters of arts; ſo fathers and preceptors think they can never have too many checks, corrections, reprimands, menaces, promiſes, inſtructions, fair ſpeeches, and fine arguments. You will act wiſer than all this, by being reaſonable yourſelf, and never arguing with your child, particularly in ſtriving to reconcile him to what he diſlikes: for to uſe him to reaſon only upon diſagreeable ſubjects, is the way to diſguſt him, and bring argument early into diſcredit with a mind incapable of underſtanding it. Exerciſe his corporeal organs, ſenſes and faculties as much as you pleaſe, but keep his intellectual ones inactive as long as poſſible. Be cautious of all the ſentiments he acquires previous to the judgment, which ſhould enable him to ſcrutinize them. Prevent or reſtrain all foreign impreſſions; and, in order to hinder the riſe of evil, be not in too great a hurry to inſtill good; for it is only ſuch when the mind is enlightened by reaſon. Look upon every delay as an advantage; it is gaining a great deal to advance without loſing any thing: let the infancy of children therefore have time to ripen. In ſhort, whatever inſtruction is neceſſary for them, take care not to give it them to-day, if it may be deferred without danger till to-morrow.

Another conſideration which confirms the utility of this method, is the particular genius of the child, which ought to be known before it can be judged what moral regimen is beſt adapted to it. Every mind hath its peculiar turn, according to which it ought to be educated; and it is of very material conſequence to our endeavours, that it be educated according to that turn and not to any other. The prudent governor will watch a long time the workings of nature, will obſerve his pupil well before he ſpeaks the firſt word to him; leave then his natural character at liberty to unfold itſelf; lay it under no reſtraint whatever, that it may be the better laid open to view. Do you think the time loſt in which a child is thus left at liberty? Quite the contrary; it will be ſo beſt employed: for, is it not thus you yourſelf learn to huſband time ſtill more precious? If you ſet about any thing, before you know in what manner

ner to act, you proceed at random: liable to miſtake, you are frequently obliged to undo what is done; and find yourſelves farther from the end deſigned than if you had been leſs precipitate to begin the work. Act not like the miſer, who loſes much becauſe he is unwilling to loſe a little; but ſacrifice in infancy that time which you will regain with uſury in a more advanced age. A prudent phyſician does not go blundering to preſcribe, at firſt ſight of the ſick, he enquires firſt into the temperament and circumſtances of the patient, and then adapts his preſcription to them: he begins late to adminiſter his remedies, and hence effects a cure; while the precipitate phyſician infallibly kills.

But where, will it be ſaid, muſt we place an infant thus to be educated as an inſenſible being, as a mere automaton? Shall we take him to the world in the moon, or to ſome deſart iſland? Shall we ſeparate him from the reſt of his ſpecies? Will he not, if in the world, have before him continually the proſpect and example of the paſſions of others? Will he never meet in company with children of his own age? Will he not ſee his parents, his neighbours, his nurſe, his governeſs, his ſervant, and at laſt, his governor himſelf, who after all will be no angel? This objection is reaſonable and ſolid. But have I told you the natural education of a child was an eaſy undertaking? Is it my fault, ye men of ſociety! that you have made every thing which is right ſo difficult to be put in execution? I perceive the difficulties, I acknowledge them; and perhaps they are inſurmountable. It is, however, certain that, by endeavouring to obviate them, we may ſucceed to a certain degree. I only take upon me to point out the end we ſhould aim at: I don't affirm it is poſſible to reach it; but I affirm that he who approaches the neareſt this end hath ſucceeded the beſt.

Humorous Origin of the Plays and Paſtimes of Children.

A Manuſcript written by a great uncle of mine, who dy'd ſoon after the revolution, came lately into my hands. It is a ſort of chronological animadverſion upon the plays and paſtimes of children; by comparing which with the times, when he ſuppoſes them to be invented, he would ſhew that they were ſo many political ſatires, to ridicule ſuch follies and corruptions, as it was not ſafe to do in any other manner.—My uncle was a very honeſt man, a great lover of liberty, and in the main a man of ſenſe; but a little whimſical in his writings, as will be ſeen by this abſtract of his manuſcript.

"*Hot cockles*, and *More Jacks to the Mill*, were certainly invented in the higheſt times of ignorance and ſuperſtition; when the Layety were hoodwink'd, and a parcel of Monks were ſaddling their backs, and baſtinadoeing them.

"*Blindman's Buff* was a ridicule upon Harry the 8th and Woolſey; where the cardinal miniſter was bewildering his maſter, with treaty upon treaty with ſeveral princes, leaving him to catch whom he could, till at laſt he caught his miniſter, and gives him up

to be *buffeted*.—When this reign was farther advanced, and many of the Abbey-Lands had been alienated, but the Clergy still retain'd some power; the play most in fashion was, *I am upon the Fryar's ground, picking up gold and silver.*

"Edward the 6th was a child himself; but a child of a pious and studious disposition; and this good example of the prince was generally follow'd by his people, who gave themselves up more to study than play, which was but little practised in this reign.

"In queen Mary's reign, *Tag* was all the play; where the lad saves himself by touching of *cold iron*.——By this it was intended to shew the severity of the church of Rome; and that if people had once gone off to the reformers, tho' they were willing to return to their old idolatry, they must do it upon hard terms.—But in later times, this play hath been alter'd amongst children of quality, by touching of *gold* instead of *iron*.

"There is great reason to believe, says my uncle, that queen Elizabeth herself invented the play, *I am a Spanish merchant*; and that Burleigh's children were the first, who play'd at it. In this play, if any one offers to sale what he hath not his hand upon, or touches, he *forfeits*——This was meant, no doubt, as an instruction to traders not to give credit to the Spaniards. But when that glorious queen had reveng'd the injuries of her subjects, upon that pyratical nation, the play of *commerce* succeeded, and was in fashion during all her reign.

"With king James I. and the Scottish nation, was introduced the acting of *Proverbs* and games of *Dumb-shew*; which lasted till the power of the star-chamber grew so exorbitant, that to expose and ridicule it, the game of *Similes* was mightily play'd at.

"This game gave way, some time before the troubles, to *cross-purposes*; which was play'd at by children of all parties.

"Upon the death of that misguided king, Charles the 1st, the ridicule of the times turn'd against monarchy; which, during the commonwealth, was burlesqued by every child in Great Britain, who set himself up in mock-majesty, and play'd at *questions and commands*—As, for instance, *king I am*, says one boy; another answers, *I am your man*; then his majesty demands, *what service he will do him*; to which the obsequious courtier replies, *the best and worst, and all I can*.

"During all Oliver's time, the chief diversion was, *the parson hath lost his fuddling cap*; which needs no explanation.

"At the restoration of Charles the 2d, when nothing was thought of but pleasure and gallantry, a parcel of love games were introduced; as, *I love my love with an A; a flower and a lady*; and *I am a lusty wooer*; which that merry monarch was said to have often play'd at himself, with many of the court-ladies; and the children went on a long time, to their great prejudice, in these effeminate plays. But when the people began seriously to reflect on the vast sums, which the restoration of this family had cost, and what ill returns were made them; when they saw unnatural alliances enter'd into with their enemies; the power of France raised; the Dutch neglected;

neglected; the liberty of the press restrain'd; plots forg'd, in order to raise armies; Papists countenanced; and many other things done, which threaten'd their liberty; all true lovers of their country exerted themselves; the plays were chang'd; and the latter end of this reign, as well as all king James the 2d's, the *children of England*, except the *children of a few Courtiers*, play'd at the game, *I am come to torment you.*

"At the Revolution, when all people recover'd their liberty, the children play'd promiscuously at what game they liked best—But the impartiality of an historian obliges me to acknowledge that the most favourite one was *puss in the corner*. Every body knows that, in this play, four boys or girls post themselves at the four corners of a room, and a fifth in the middle, who keeps himself upon the watch to slip into one of the corner-places, whilst the present possessors are endeavouring to supplant one another—This was certainly designed to ridicule the scrambling for places, at that great conjuncture; and I wish I could say that it is not too much in fashion at present amongst the *Children of England*, both spiritual and temporal."

I shall now set down the Game of *Similes* at large, with my uncle's reflections upon it.

"I think, says he, there can be no doubt that the play called *Similes* was invented to ridicule the forced innendoes and arbitrary judgments of the *Star-Chamber*; for as, in that Court, the Judges wrested the Words of the party accused, according to their interpretation; so, on the contrary, the Party in the play of *Similes*, hath leave to give his own construction; and if he can make out the remotest similitude between his word and the word whispered, he saves his forfeit, which should the Judge demand of him, he is to be tried by a Jury of the whole company, and if the Judge cannot prove his interpretation, he forfeits himself. When the Person who receives the forfeit, hath whispered a word to the next, every one of the company is required to give another word aloud; which suppose, for instance, as follows—*A Norfolk dumplin—An urchin—quicksilver—shining sand—A forest—A bishop.—A cuckow—A charcoal fire—A Spanish lady—A privateer*—The word whispered was *Conde Olvarez*, formerly prime minister of Spain. Then each person was either to forfeit, or make out some similitude between the Conde and the word he gave, as thus; the Conde is like a *Norfolk dumpling*; being hard and heavy of digestion.—Like an *urchin*, for he withers the teat that nourishes him.—*Quicksilver*, because his favours are chiefly bestowed on persons of the most debauched constitutions.—*Shining sand*; he puts the same gloss upon truth and falsehood.—A *Forest*; he maintains beasts of prey.—A *Bishop*; sweet, sour, and intoxicating.—A *Charcoal-fire*; which consumes without blazing—A *Cuckow*, makes others maintain his family—A *Spanish lady*; is always veiled.—A *Privateer*; plunders the Innocent."

This round of Similes made so strong an impression upon me, though I was then but very young, that it is still fresh in my memory; and several of my playmates have since distinguished themselves in the cause of liberty, even with their lives, against our old enemies

enemies the Spaniards, who will never ceaſe to plunder and inſult us, whilſt they can do it with impunity.

As our readers no doubt will be greatly pleaſed at ſeeing the arguments uſed on the important queſtion of the taxation of our American colonies; which lately engaged the attention of the legiſlature, we are glad to be able to gratify their curioſity by inſerting the following article, which appeared in the UNIVERSAL MUSEUM and COMPLETE MAGAZINE for laſt month.

Debates in the AREOPAGUS *of* ATHENS.

THE debate in the Athenian Areopagus was upon the taxing their Ionian colonies, which produced many learned arguments upon either ſide. From thoſe who made ſpeeches upon this occaſion, we ſhall inſert only the following. The debate was begun by Ariſtides, who ſpoke to this purpoſe.

"Honoured Preſident,

I am not a little ſurprized how a bill of this kind could find its way into this honourable aſſembly; a bill fraught with almoſt as many abſurdities as lines. We are, by the tenor of this meaſure, to lay a tax upon perſons over whom we have perhaps no legal authority; I mean as members of this aſſembly: over men who conſider themſelves as independent upon us, having a peculiar mode of juriſdiction among themſelves; and this tax is of ſuch a nature, and laid at ſuch a time, that it muſt be utterly unſuited to all the purpoſes it is calculated to anſwer.

In the firſt place, Sir, the people to be taxed appear to me as ſenſible of their own peculiar privileges; and as they have hitherto contributed their contingents to government merely by a court peculiar to themſelves, it will be no eaſy taſk to induce them to ſubmit to a method of levying impoſts where they diſallow authority. Nor, Sir, can I think there is any abſurdity in their thinking in this manner. Though ſeparated from us by an immenſe tract of ocean, theſe coloniſts ſtill are Grecians, and as ſuch they boaſt themſelves. Now it hath ever been a Grecian's pride, that he cannot be taxed unleſs by his own conſent; for upon chuſing members into this aſſembly, he gives up his conſent to the care of his repreſentative; and whatever is done here, is in ſome meaſure his own act, and ratified by his own allowance. But with regard to our colonies, Sir, they have no repreſentatives; and if they are taxed, the burthen muſt be laid upon them *nolens volens*: they can differ from the enſlaved inhabitants of Perſia or Sofala only in this, that their tyrants are more remote, and, I tremble to think it, perhaps thus more eaſily oppoſed.

I would not willingly think of evils to come, unleſs to avoid them. Let us conſider, Sir, for a moment, a number of men bred up in conſcious freedom, by this tax in a moment deprived of what they held moſt dear, the power of taxing themſelves. Do we think that ſo oppreſſive a meaſure will produce no diſturbances among

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them? Or do we think that ſix or ſeven thouſand regular forces, which are ſcattered there over an immenſe tract of country, and employed againſt other enemies, could be capable of repelling the inſurrections of near two million, and animated in the cauſe of freedom. I tremble for the conſequences of ſuch a meaſure; and even if it were to be avoided by increaſing our taxes at home, yet ſuch a procedure were the moſt eligible.

But the expediency of this meaſure demands our ſerious conſideration. The colonies are juſt now beginning to reſpire from the calamities of a terrible war, and are ſtill threatened with fierce and barbarous enemies. This therefore is not a time for impoſing new burthens upon them; they have ſhewn, in times of neceſſity, a chearfulneſs to ſupply their proper quotas towards the general welfare of themſelves and their mother country; they have bravely withſtood the common enemy of themſelves and all Greece. Surely it will be but an indifferent retaliation, if for what they have done, they are deprived of ſhewing their generoſity on any future occaſion; and becauſe they proved uſeful ſubjects, we attempt to make them reluctant ſlaves.

On this Periander made the following reply.

"I find, Sir, that we are not to expect laying any taxes, in the preſent ſtate of oppoſition, without the warmeſt debates. We have ſo many patriots in this aſſembly attached to our ultramarine intereſts, that I am not ſurprized to find even the moſt ſalutary meaſures for the mother country rejected. But I confeſs, nothing that has as yet fallen upon this ſubject, has in the leaſt induced me to alter my opinion. The great capital argument, which I find on this ſubject, is, that no Grecian is or can be taxed, but by his own conſent: which muſt mean one of theſe three propoſitions; either, that no Grecian can be taxed without his own conſent, as an individual; or that no Grecian can be taxed without the conſent of the perſons he chuſes to repreſent him; or that no Grecian can be taxed without the conſent of the majority of all thoſe, who are elected by himſelf and others of his fellow-ſubjects to repreſent them. Now let us impartially conſider, whether any one of theſe propoſitions are in fact true.

Firſt, then, that no Grecian is or can be taxed, but by his own conſent as an individual: this is ſo far from being true, that the very reverſe is immediately ſo. No man that I know of is taxed by his own conſent; and a Grecian, I believe, is as little likely to be ſo taxed, as any man in the world.

That no Grecian is, or can be taxed, but by the conſent of thoſe whom he has choſen to repreſent him, is likewiſe without foundation.

Laſtly, that no Grecian is, or can be taxed, without the conſent of the majority of thoſe, who are elected by himſelf and others of his fellow-ſubjects, to repreſent them, is certainly as falſe as the other two; every Grecian is taxed, and not one in twenty repreſented. Copyholders, leaſeholders, and all men poſſeſſed of perſonal property only, chuſe no repreſentatives; many of our richeſt and

and moſt flouriſhing trading towns ſend no Senators to this aſſembly, conſequently cannot conſent by their repreſentatives, becauſe they chuſe none to repreſent them; yet are they not Grecians? or are they not taxed?

But it is urged, that the colonies are by their charters placed under diſtinct governments, each of which has a legiſlative power within itſelf, by which alone it ought to be taxed; that if this privilege is once given up, that liberty which every Grecian has a right to, is torn from them, and they are all ſlaves.

The liberty of a Grecian is a phraſe of a various ſignification, and I will not here preſume to define its meaning; but I ſhall venture to aſſert what it cannot mean; that is, an exemption from taxes impoſed by the authority of the Senate of Athens; nor is there any charter, that ever pretended to grant ſuch a privilege to any colony in Ionia; and had they granted it, it could have had no force, their immunities being derived from the adminiſtration, and no charter from that can poſſibly ſuperſede the right of the whole legiſlature: Their immunities are undoubtedly no more than thoſe of all corporations, which impower them to make bye-laws, and raiſe duties for the purpoſes of their own police, for ever ſubject to the ſuperior authority of the ſenate.

Thus much for the right. Let us now a little inquire into the expediency of this meaſure; to which two objections have been made; that the time is improper, and the manner wrong.

As to the firſt, can any time be more proper to require ſome aſſiſtance from our colonies, to preſerve to themſelves their preſent ſafety, than when this country is almoſt undone by procuring it? Can any time be more proper to impoſe ſome tax upon their trade, than when they are enabled to rival us in our manufactures, by the encouragement and protection which we have given them? Can there be a more proper time to compel them to fix certain ſalaries on their judges, than when we ſee them ſo dependent on the humours of their aſſemblies, that they can obtain a livelihood no longer than *quam diu ſe male geſſerint?* Can there be a more proper time to force them to maintain an army at their expence, than when that army is neceſſary for their own protection, and we are utterly unable to ſupport it.

As to the manner; that is, the impoſing taxes on the colonies by the authority of this ſenate, it is ſaid to be harſh and arbitrary; and that it would have been more conſiſtent with juſtice, at leaſt with maternal tenderneſs, for adminiſtration here to have ſettled quotas on each of the colonies, and have then tranſmitted them, with injunctions, that the ſums allotted ſhould be immediately raiſed by their reſpective legiſlators, on the penalty of their being impoſed by the ſenate, in caſe of their non-compliance? But was this to be done, what would be the conſequence? Have their aſſemblies ſhewn ſo much obedience to the orders of the State that we could reaſonably expect, that they would immediately tax themſelves on the arbitrary command of a miniſter? would it be poſſible here to ſettle thoſe quotas with juſtice, or would any one of the colonies ſubmit to them,

them, were they ever ſo juſt? Should we not be compared to thoſe tyrants, who uſed to ſend orders to their ſubjects to murder themſelves within ſo many hours, moſt obligingly leaving the method to their own choice, but on their diſobedience threatening a more ſevere fate from the hands of an executioner? And ſhould we not receive votes, ſpeeches, reſolutions, petitions, and remonſtrances in abundance, inſtead of taxes? In ſhort, we either have a right to tax the colonies, or we have not; if the ſenate is poſſeſſed of this right, why ſhould it be exerciſed with more delicacy in Ionia, than it has ever been even in Athens itſelf? If, on the other hand, they have no ſuch right, ſure it is below the dignity, as well as juſtice of the legiſlature, to intimidate the colonies with vain threats, which they have really no right to put in execution.

It has been aſſerted, that every ſhilling, which our colonies can raiſe either by cultivation or commerce, finally centers in this country; and therefore it is argued, we can acquire nothing by their taxation, ſince we can have no more than their all; and whether this comes in by taxes or by trade, the conſequence is the ſame. But allowing this aſſertion to be true, which it is not, yet the reaſoning upon it is glaringly falſe: for ſurely it is not the ſame, whether the wealth derived from theſe colonies flows immediately into the coffers of the public, or into the pockets of individuals, from whence it muſt be ſqueezed by various domeſtic taxes before it can be rendered of any ſervice to the nation: ſurely it is by no means the ſame, whether this money brought in by taxes enables us to diminiſh part of that enormous debt contracted by the laſt expenſive war, or whether coming in by trade, it enables the merchant, by augmenting his influence, together with his wealth, to plunge us into new wars and new debts for his private advantage.

A City NIGHT-PIECE.

THE clock has ſtruck two, the expiring taper riſes and ſinks in the ſocket, the watchman forgets the hour in ſlumber, the laborious and the happy are at reſt, and nothing now wakes but guilt, revelry and deſpair. The drunkard once more fills the deſtroying bowl, the robber walks his midnight round, and the ſuicide lifts his guilty arm againſt his own ſacred perſon.

Let me no longer waſte the night over the page of antiquity, or the ſallies of cotemporary genius, but purſue the ſolitary walk, where vanity, ever changing, but a few hours paſt, walked before me, where ſhe kept up the pageant, and now, like a froward child, ſeems huſhed with her own importunities.

What a gloom hangs all around! the dying lamp feebly emits a yellow gleam, no ſound is heard but of the chiming clock, or the diſtant watch-dog. All the buſtle of human pride is forgotten, and this hour may well diſplay the emptineſs of human vanity.

There may come a time when this temporary ſolitude may be made continual, and the city itſelf, like its inhabitants, fade away, and leave a deſart in its room.

What cities, as great as this, have once triumph'd in exiſtence, had their victories as great as ours, joy as juſt, and as unbounded as we, and with ſhort ſighted preſumption, promiſed themſelves immortality. Poſterity can hardly trace the ſituation of ſome. The ſorrowful traveller wanders over the awful ruins of others, and as he beholds, he learns wiſdom, and feels the tranſience of every ſublunary poſſeſſion.

Here ſtood their citadel, but now grown over with weeds; there their ſenate-houſe, but now the haunt of every noxious reptile; temples and theatres ſtood here, now only an undiſtinguiſhed heap of ruin. They are fallen, for luxury and avarice firſt made them feeble. The rewards of ſtate were conferred on amuſing, and not on uſeful members of ſociety. Thus true virtue languiſhed, their riches and opulence invited the plunderer, who, though once repulſed, returned again, and at laſt ſwept the defendants into undiſtinguiſhed deſtruction.

How few appear in thoſe ſtreets, which but ſome few hours ago were crowded; and thoſe who appear, no longer now wear their daily maſk, no attempt to hide their lewdneſs or their miſery.

But who are thoſe who make the ſtreets their couch, and find a ſhort repoſe from wretchedneſs at the doors of the opulent? Theſe are ſtrangers, wanderers, and orphans, whoſe circumſtances are too humble to expect redreſs, and their diſtreſſes too great even for pity. Some are without the covering even of rags, and others emaciated with diſeaſe; the world ſeems to have diſclaimed them; ſociety turns its back upon their diſtreſs, and has given them up to nakedneſs and hunger. Theſe poor ſhivering females, have once ſeen happier days, and been flattered into beauty. They have been proſtituted to the gay luxurious villain, and are now turned out to meet the ſeverity of winter in the ſtreets. Perhaps now lying at the door of their betrayers, they ſue to wretches whoſe hearts are inſenſible to calamity, or debauchees who may curſe, but will not relieve them.

Why, why was I born a man, and yet ſee the ſufferings of wretches I cannot relieve! Poor houſeleſs creatures! the world will give you reproaches, but will not give you relief. The ſlighteſt misfortunes, the moſt imaginary uneaſineſſes of the rich, are aggravated with all the power of eloquence, and engage our attention; while you weep unheeded, perſecuted by every ſubordinate ſpecies of tyranny, and finding enmity in every law.

Why was this heart of mine formed with ſo much ſenſibility! or why was not my fortune adapted to its impulſe! tenderneſs, without a capacity of relieving, only makes the heart that feels it more wretched than the object which ſues for aſſiſtance.

But let me turn from a ſcene of ſuch diſtreſs to the ſanctified hypocrite, *who has been talking of virtue till the time of bed*, and now ſteals out, to give a looſe to his vices under the protection of midnight; vices more atrocious, becauſe he attempts to conceal them. See how he pants down the dark alley, and, with haſtening ſteps, fears an acquaintance in every face. He has paſſed the whole day

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in company he hates, and now goes to prolong the night among company that as heartily hate him. May his vices be detected; may the morning riſe upon his ſhame: yet I wiſh to no purpoſe; villainy, when detected, never gives up, but boldly adds impudence to impoſture.

A CHARACTER.

LYSIPPUS is a man whoſe greatneſs of ſoul the whole world admires. His generoſity is ſuch, that it prevents a demand, and ſaves the receiver the trouble and the confuſion of a requeſt. His liberality alſo does not oblige more by its greatneſs, than by his inimitable grace in giving. Sometimes he even diſtributes his bounties to ſtrangers, and has been known to do good offices to thoſe who profeſſed themſelves his enemies. All the world are unanimous in the praiſe of his generoſity; there is only one ſort of people, who complain of his conduct. Lyſippus does not pay his debts.

The Story of ALCANDER *and* SEPTIMIUS, *tranſlated from a Byzantine Hiſtorian.*

ATHENS, even long after the decline of the Roman empire, ſtill continued the ſeat of learning, politeneſs and wiſdom. The emperors and the generals, who in theſe periods of approaching ignorance, ſtill felt a paſſion for ſcience, from time to time, added to its buildings, or encreaſed its profeſſorſhips. Theodoric, the Oſtrogoth, was of the number; he repaired thoſe ſchools which barbarity was ſuffering to fall into decay, and conitnued thoſe penſions to men of learning, which avaricious governors had monopolized to themſelves.

In this city, and about this period, Alcander and Septimius were fellow ſtudents together. The one the moſt ſubtle reaſoner of all the Lyceum; the other the moſt eloquent ſpeaker in the academic grove. Mutual admiration ſoon begot an acquaintance, and a ſimilitude of diſpoſition made them perfect friends. Their fortunes were nearly equal, their ſtudies the ſame, and they were natives of the two moſt celebrated cities in the world; for Alcander was of Athens, Septimius came from Rome.

In this mutual harmony they lived for ſome time together, when Alcander, after paſſing the firſt part of his youth in the indolence of philoſophy, thought at length of entering into the buſy world, and as a ſtep previous to this, placed his affections on Hypatia, a lady of exquiſite beauty. Hypatia ſhewed no diſlike to his addreſſes: The day of their intended nuptials was fixed, the previous ceremonies were performed, and nothing now remained but her being conducted in triumph to the apartment of the intended bridegroom.

An exultation in his own happineſs, or his being unable to enjoy any ſatisfaction without making his friend Septimius a partner, prevailed upon him to introduce his miſtreſs to his fellow ſtudent, which

he did with all the gaiety of a man who found himſelf equally happy in friendſhip and love. But this was an interview fatal to the future peace of both. Septimius no ſooner ſaw her, but he was ſmit with an involuntary paſſion. He uſed every effort, but in vain, to ſuppreſs deſires at once ſo imprudent and unjuſt. He retired to his apartment in inexpreſſible agony; and the emotions of his mind in a ſhort time became ſo ſtrong, that they brought on a fever, which the phyſicians judged incurable.

During this illneſs, Alcander watched him with all the anxiety of fondneſs, and brought his miſtreſs to join in thoſe amiable offices of friendſhip. The ſagacity of the phyſicians, by this means ſoon diſcovered the cauſe of their patient's diſorder; and Alcander being apprized of their diſcovery, at length extorted a confeſſion from the reluctant dying lover.

It would but delay the narrative to deſcribe the conflict between love and friendſhip in the breaſt of Alcander on this occaſion; it is enough to ſay, that the Athenians were at this time arrived to ſuch refinement in morals, that every virtue was carried to exceſs. In ſhort, forgetful of his own felicity, he gave up his intended bride, in all her charms, to the young Roman. They were married privately by his connivance, and this unlooked-for change of fortune wrought as unexpected a change in the conſtitution of the now happy Septimius. In a few days he was perfectly recovered, and ſet out with his fair partner for Rome. Here, by an exertion of thoſe talents which he was ſo eminently poſſeſſed of, he in a few years arrived at the higheſt dignities of the ſtate, and was conſtituted the city judge, or prætor.

Mean while Alcander not only felt the pain of being ſeparated from his friend and his miſtreſs, but a proſecution was alſo commenced againſt him by the relations of Hypatia, for his having baſely given her up, as was ſuggeſted, for money. His innocence of the crime laid to his charge, or his eloquence in his own defence, were not able to withſtand the influence of a powerful party. He was caſt and condemned to pay an enormous fine. Unable to raiſe ſo large a ſum at the time appointed, his poſſeſſions were confiſcated, himſelf ſtript of the habit of freedom, expoſed in the market-place, and ſold as a ſlave to the higheſt bidder.

A merchant of Thrace becoming his purchaſer, Alcander, with ſome other companions of diſtreſs, was carried into the region of deſolation and ſterility. His ſtated employment was to follow the herds of an imperious maſter, and his ſkill in hunting was all that was allowed him to ſupply a precarious ſubſiſtence. Condemned to hopeleſs ſervitude every morning, waked him to a renewal of famine or toil, and every change of ſeaſon ſerved but to aggravate his unſheltered diſtreſs. Nothing but death or flight was left him, and almoſt certain death was the conſequence of his attempting to fly. After ſome years of bondage, however, an opportunity of eſcaping offered; he embraced it with ardour, and travelling by night, and lodging in caverns by day, to ſhorten a long ſtory, he at laſt arrived in Rome. The day of Alcander's arrival, Septimius

ſate

ſate in the forum adminiſtring juſtice; and hither our wanderer came, expecting to be inſtantly known, and publickly acknowledged. Here he ſtood the whole day among the crowd, watching the eyes of the judge, and expecting to be taken notice of, but ſo much was he altered by a long ſucceſſion of hardſhips, that he paſſed entirely without notice; and in the evening, when he was going up to the prætor's chair, he was brutally repulſed by the attending lictors. The attention of the poor is generally driven from one ungrateful object to another. Night coming on, he now found himſelf under a neceſſity of ſeeking a place to lie in, and yet knew not where to apply. All emaciated, and in rags as he was, none of the citizens would harbour ſo much wretchedneſs, and ſleeping in the ſtreets might be attended with interruption or danger: In ſhort, he was obliged to take up his lodging in one of the tombs without the city, the uſual retreat of guilt, poverty or deſpair.

In this manſion of horror, laying his head upon an inverted urn, he forgot his miſeries for a while in ſleep, and virtue found, on this flinty couch, more eaſe than down can ſupply to the guilty.

It was midnight, when two robbers came to make this cave their retreat, but happening to diſagree about the diviſion of their plunder, one of them ſtabbed the other to the heart, and left him weltering in blood at the entrance. In theſe circumſtances he was found next morning, and this naturally induced a further enquiry. The alarm was ſpread, the cave was examined, Alcander was found ſleeping, and immediately apprehended and accuſed of robbery and murder. The circumſtances againſt him were ſtrong, and the wretchedneſs of his appearance confirmed ſuſpicion. Misfortune and he were now ſo long acquainted, that he at laſt became regardleſs of life. He deteſted a world where he had found only ingratitude, falſhood and cruelty, and was determined to make no defence. Thus lowering with reſolution; he was dragged, bound with cords, before the tribunal of Septimius. The proofs were poſitive againſt him, and he offered nothing in his own vindication; the judge, therefore, was proceeding to doom him to a moſt cruel and ignominious death, when, as if illumined by a ray from heaven, he diſcovered, through all his miſery, the features, though dim with ſorrow, of his long loſt, lov'd Alcander. It is impoſſible to deſcribe his joy and his pain on this ſtrange occaſion. Happy in once more ſeeing the perſon he moſt loved on earth, diſtreſſed at finding him in ſuch circumſtances. Thus agitated by contending paſſions, he flew from his tribunal, and falling on the neck of his dear benefactor, burſt into an agony of diſtreſs. The attention of the multitude was ſoon, however, divided by another object. The robber, who had been really guilty, was apprehended ſelling his plunder, and, ſtruck with a panic, confeſſed his crime. He was brought bound to the ſame tribunal, and acquitted every other perſon of any partnerſhip in his guilt. Need the ſequel be related? Alcander was acquitted, ſhared the friendſhip and the honours of his friend Septimius, lived afterwards in happineſs and eaſe, and left it to be engraved on his tomb, *That no circumſtances are ſo deſperate, which providence may not relieve.*

AS we imagine that we cannot give our readers a more pleasing plate than the head of that truly respectable and esteemed patriot Lord Chief Justice PRATT, we here present them with his portrait, very elegantly engraved.

The History of CLARA FARNESE.

CLARA Farnese was Pope Paul III's sister, and the person to whom he owed his Cardinal's cap, and consequently, all that followed upon it; though he rewarded her ill for it: for he poisoned both her and his mother, that he might have all their wealth. Their father was a poor man, who went about selling farthings, like Horace's *Sallamentarius*. Clara was married young, and was soon a widow; she was a most agreeable woman, but no great beauty: her brother was bred to letters, and was one of those poor churchmen who was looking about on all hands where he might find a patron; when, on a sudden, his sister's charms, and her artifices together, raised him to an height, from which he was far enough from pretending at that time. At some public ceremony, Clara Farnese was so near Pope Alexander VI. and was so much in his eye and in his thoughts, that he ordered one of his attendants to enquire who she was, and where she lived. Instruments, on such occasions, are never wanting to great persons; and, notwithstanding the Pope's great age, yet his vices still hung so close to him, that he could have no quiet till Clara Farnese was brought to him. She resolved to manage herself on this occasion, and to raise her price as high as possible; so a Cardinal's cap for her brother was both asked and granted; a promise was made of it at last: upon which she attended upon the old lewd pope; yet when the next promotion came to be in agitation, the proposition for Abbot Farnese was rejected by Cæsar Borgia with scorn: he had never been a slave to his word, and he had no mind that his father should observe it on this occasion.

The method of a promotion is this: The Pope settles the list of the Cardinals, and writes down all their names on a paper with his own hand; and in a Consistory, when all other business is ended, he throws down the paper on the table, and says to the Cardinals, *Habetes fratres*; "You have now some Brethren." Upon that one of the Secretaries takes up the paper, and reads the names aloud; the Sbirri, [the Pope's guards] are at the door, and as soon as one is named they run for it, to see who shall be able to carry the first news to the party concerned.

On this occasion, the Pope, after he had concerted the promotion with his son, wrote down all the names. Clara Farnese was in great apprehensions for her brother: She being to pass that night with the Pope, rose when the old man was fast asleep, searched his pockets, and found the paper, but her brother's name was not in it; so set herself with great care to counterfeit the pope's hand, and wrote her brother's name the first in the list. Next morning she kept the

Pope

Pope as long in bed as possible, till word was brought him that the Consistory was set, and that the Cardinals were all come; for she reckoned, that the less time the pope had for being dressed, there was the less danger of his looking into his paper. Accordingly, without ever opening it, he went into the Consistory, and as usual threw down the list on the table; but to the great surprize of him, and all his confidents, the first name that was read was that of Abbot Farnese. However, the pope thought it better to let the matter pass, than to suffer the true secret to be known. It is well that the doctrine of the *intention* does not belong to the creation of cardinals; otherwise there was a nullity with a witness. Thus began the long course of Pope Paul III's greatness, for he lived above 50 years after this, and laid the foundation of the family of Parma, which he saw quite overthrown, his son being assassinated in his own time, and both his grandchildren having revolted against him, which, as was believed, hastened his death, though he was then fourscore. From him are descended the present Kings of Spain, and the Duke of Parma (Don Philip) by their mother, Elizabeth Farnese. There are several pictures of Clara Farnese in the Palestrina.

POETRY.

To a LADY *in a Fever.*

AROund your couch while sighing lovers view,
Wit, beauty, goodness, suffering all in you,
So mournful is the scene, 'tis hard to tell
Which face betrays the sick, and which the well:
They feel not their own pains while yours they share;
Worse tortur'd now, than lately by despair.
For bleeding veins, a late relief is found,
When ir'n red hot, by burning stops the wound.
Their former anguish now they wish t' endure,
And would, on any terms, obtain your cure.
Grant Heav'n! they cry, this moment our desire
To see her well, tho' we the next expire.

Receipt to make LOVE.

TWO or three dears, and two or three sweets,
Two or three balls, and two or three treats;
Two or three serenades giv'n at the door,
Two or three Vows how much you adore;
Two or three messages sent in a day,
Two or three times leading out to the play,
Two or three soft things said by the way;
Two or three tickets sent two or three times,
Two or three billet-deaux all writ in rhymes;
Two or three months keeping strict to these rules,
Can never fail making two or three fools.

LOVE *and* KNOWLEDGE.

To Orinda.

ORinda, blooming, fair, and young,
Kindly accept my humble song;
Tho' rude the verse, and void of art,
It flows from no dishonest heart.
The Muse would soar a greater height,
Did not your absence damp her flight;
The pleasing converse is no more,
In which she so much joyed before:
Then, act the kind good natur'd friend,
Nor disregard th' advice I send,
Freely approve these artless lays,
Sung by a muse you've deign'd to praise.
A medley doth this life compose,
Of transient joys, and pungent woes;
Things here, have an uncertain stay,
Awhile they flourish, then decay;
All beings must submit to death,
And kings and peasants yield their breath:
One grave shall level rich and poor,
The rich shall leave their idle store,
Which can't prolong life's date an hour.
CRESUS, and IRUS, are the same,
For either's but an empty name.
Proud Blenheim's Pile shall kiss the ground,
And all its pomp no more be found;
Ev'n brass and stone shall wear away,
And your fair form too soon decay:
Then greatly covet wisdom's lore,
And nobly scorn the glitt'ring ore;
The dolt, with all his shining mass,
Is but, at best, a golden ass.
Let Love and books divide your thought,
Learn all that Greece and Rome have taught:
In these immortal works you'll find,
Good sense, with wit, and judgment join'd,
Rich entertainment for the mind.
Revolve 'em o'er and o'er again,
Their noble sentiments retain,
Nor think your labour will be vain:
Regard what Precepts thence arise,
Then shall you happy be and wise.
Let Love inspire your gentle mind,
But pure and chaste, and all refin'd;
Free from each base, and sordid view,
Such love as ancient poets drew;

Smile

Smile kindly on some blooming youth,
Endow'd with learning, wit and truth;
To merit yield, and honest arts,
Nor make a merchandize of hearts;
Pity the nymphs, whose Charms are sold,
Who barter happiness for gold,
Condemn'd to waste a tedious life,
In endless discontent and strife:
But happier moments, you shall prove,
Blest with content and mutual love;
From these, eternal pleasure flow,
Nor is there more of heav'n below.
May you be blest'd with joys like these,
And pass your hours in letter'd ease;
Thus, ever may you be—
And kindly still remember me.

The following copy of verses is handed about, said to be the production of the greatest Lady in this nation, and will serve (if so) not only to convince us of her proficiency in the English language, but of the greatness of her natural genius.

GENTEEL is my DAMON, engaging his air,
His face, like the moon, is both ready and fair;
Soft love sits enthron'd in the beam of his eyes,
He's manly yet tender, he's fond and yet wise.

He's ever good-humour'd, he's gen'rous and gay,
His presence can all ways drive sorrow away;
No vanity sways him, no folly is seen,
But open his temper, and noble his mien.

By virtue illumin'd his actions appear,
His passions are calm, and his reason is clear;
An affable sweetness attends on his speech,
He's willing to learn, tho' he's able to teach—

He has promis'd to love me—his word I'll believe,
For his heart is too honest to let him deceive;
Then blame me, ye fair ones, if justly ye can,
Since the picture I've drawn is exactly the man.

The ROVER *fix'd.*

CLOE! your sovereign charms I own,
I feel the fatal smart;
The Glory, you can boast, alone,
To fix my wand'ring heart.

Your beauteous sex, with various grace,
My passions, oft, have mov'd;
And now a shape, and then a face,
As fancy led I lov'd.

So does the vagrant bee explore
Each sweet that nature yields,
Lightly she skims from Flow'r to Flow'r,
And ranges all the Fields.

But! you have found the cruel art
To cure my roving mind;
Each female beauty you impart,
Your Sex, in one, combin'd.

My eyes disclose my secret pain;
My constant sighs discover,
Tho' in deep silence I remain,
That I am CLOE's lover.

Irksome I pass the hours away,
When banished from your sight;
I languish all the livelong day,
And all the wakeful night.

Tell me ye learn'd, who study much
The nature of mankind,
Why, if I think, or look, or touch,
If she be coy, or kind.

I feel my bosom, strangely move,
Quick throbbings seize my breast;
All that I know, is, That I love:
Do you explain the rest.

A SONG, *occasioned by the sight of a Corpse in the* Thames.

WHEN shall I, wretched maid!
Lay down my cares and eyes?
When join my lover's shade,
And by his ashes lye?
——But ah! rage in vain,
With fruitless moan complain;
I see no end of pain,
No end of pain.

Since love with silken bands,
Entwin'd our hearts and hands,
And innocently gay,
Wing'd all our hours away;
——Now, where loud billows roar,
His dead corps beats the shore,
And knows such joys no more,
Alas! no more.

Sad on the rocky strand,
I take his corps to hand,
And, while I weep and rave,
Implore a friendly grave:
——But who will deign their aid,
To soothe her plaintive shade,
Or help a wretched maid;
A wretched maid!

Dear Youth! I wail thy doom,
In angry tempest lost,
Dear Youth! deny'd a tomb,
To soothe thy plaintive ghost.
——But, o'er my funeral bed,
Will one kind tear be shed,
To wail poor JULIA dead?
Poor JULIA dead!

Epigram on the death of a Friar.

A Friar dy'd the other day,
And strait to hell he post away;
He knock'd for entrance at the gate,
And wondered that they made him wait:
He thought himself of such condition,
That they could near refuse admission:
At length a page from Satan came,
And thus addressed him in his name:
Monk, you must quickly quit these borders,
We know the tenets of your orders;
Maxims that shock our whole abode;
They say, on earth you eat your God!
And since above you're so uncivil,
Below, no doubt, you'd eat the devil.

FOREIGN

FOREIGN AFFAIRS.

Peterſburgh, January 20.

ABOUT ten months ago the deputies of the two Ruſſian trading companies, one eſtabliſhed at Kamſchatka, and the other at the mouth of the river Kowina, gave an account of their diſcoveries to the court. Thoſe of Kowina, ſetting out from that river, doubled Cape Iſchuktſchi in 74 deg. lat. and falling down to the ſouth, through the Strait which ſeparates Europe from America, they diſcovered ſome inhabited iſlands in the 64th degree of latitude. They went aſhore and ſettled a trade for the fineſt furs with the iſlanders, and have brought to the Empreſs from thence ſome of the fineſt black foxes ſkins that ever were ſeen. They named them the Iſlands of Aleyut, and imagine that ſome of them are very near America. Thoſe of Kamſchatka went to the northward, and met their companions at the above iſlands; ſo that for the convenience of trade, they have fixed a factory at the iſle of Beering. When this report was made, the court came to a reſolution of puſhing theſe diſcoveries, and Lieut. Col. Elenmer is ſent, with ſeveral able geographers, to ſail from the river Anadit, and go to the ſame coaſts and beyond them.

As Kamſchatka is 3000 leagues from Peterſburgh, theſe ſettlements will be of little uſe to trade, but we may nevertheleſs hereby perfect our knowledge in the geography of thoſe parts.

Ratiſbon, Feb. 21. The chapter of Oſnabrug have juſt diſtributed here a new memorial in anſwer to that which has been diſperſed by the Hanoverian miniſtry. In this memorial they eſtabliſh it as a fact, that the regency belongs to the chapter, during the minority of the Biſhop, as well as during the vacancy of the ſee; that anciently the Emperor, in virtue of his royal right, could have provided againſt it, both in one caſe and the other; that the Pope, ſince the extinction of this right, has the power of determining with regard to the adminiſtration of a biſhoprick poſſeſſed by a Biſhop who is incapable; and that cuſtom, the privileges of the chapter, and in particular the perpetual capitulation, fix in this reſpect the rights of the chapter, from which it has not derogated, excepting that the perpetual capitulation has aſſured to the minor Biſhop a penſion of eight thouſand crowns, and the right of retaining near the regency two of his officers, in quality of counſellors. It deſtroys the parity of the preſent caſe with that which happened at Ratiſbon in 1587, and takes notice of an anachroniſm in the Hanoverian memorial, the author of which pretends, that the Prince of Bavaria had been poſtulated in 1587, the year in which the aforeſaid agreement was made, whereas he was poſtulated in 1579; that it was the following year, that Pope Gregory XIII. when he confirmed the poſtulation, recommended ſimply to the father of the minor Biſhop to proteſt and favour the church of Ratiſbonne, and that it was not till 1585, that Sixtus V. granted the adminiſtration of the epiſcopal domaine to Duke William, who did not enjoy it peaceably till 1587, in virtue of that agreement of which we have ſpoken, and which was made under the mediation of the Emperor. They oppoſe to this inſtance, if indeed it can be cited, the examples of the archbiſhopric of Magdebourgh, and of the biſhoprics of Merſebourgh and Lubeck, which are ſtill more analagous to the preſent caſe.

Leghorn, Feb. 4. According to the laſt advices from Corſica, the commander in chief of the French troops, and the Vicegerent of the Republic of Genoa, have fallen out; the latter having inſiſted upon a garriſon being placed in Macinaggio, which the former would not comply with, becauſe it was not ſtipulated by the treaty; upon which they have both ſent their complaints to Genoa.

Hamburgh, Feb. 22. The Jeſuit Kreins, Dean and Profeſſor of Divinity at Trieſt, has been deprived of thoſe two places, and baniſhed the Electorate, for having aſſerted, in ſome public theſes, that the two greateſt ſchiſms which have happened in the church, are thoſe of the Greeks and of the French.

Paris, Feb. 15. The parliament hath iſſued two arrets, by which the Pope's late bull in favour of the Jeſuits, and his three briefs addreſſed to the Biſhops of Grenoble, Alais, and Angers, are ſuppreſſed; and no bulls or briefs, for the future, are to be accepted, unleſs they be accompanied by the King's letters patent.

March 8. According to a letter from Abbeville, a ſlight ſhock of the earth was felt in that city and neighbourhood on the 14th ult. A hollow murmuring ſound was heard at the ſame time, which came from the ſea-coaſt, and directed itſelf from north to ſouth.

Liſbon, Feb. 20. On the 16th there was a private Auto-de-Fe, in the palace of the Inquiſition, when ſentence paſſed on two priſoners, one of whom was an inhabitant of Fernambucca in the Brazils, and the other a monk of the order of St. Auguſtine. The firſt was condemned to be whipped, and to perpetual ſlavery in the galleys, for the crime of bigamy; and the other, convicted of abuſing the confeſſion chair, is deprived, for ever, of all ſacerdotal functions, and of exerciſing any employ in his order, and to be confined a year in the dungeon of the holy office.

The Governor of St. Salvador, in the Brazils, writes, that the Jeſuits in Paraguay are

able, from a perfect diſcipline of the Indian nations, to bring 100,000 fighting men into the field; and that numbers of this ſociety are frequently arriving from Europe.

Rome, Feb. 23. Mr. Wilkes, the famous Engliſhman, whoſe hiſtory is ſo well known in Europe, is arrived here. He lodges in the Spaniſh-ſquare, and is very much careſſed by all his countrymen in this city.

AMERICAN NEWS.

Boſton, in New England, Jan. 10. Monday laſt Capt. Atwood arrived here from Halifax, by whom we learn, that all the Neutrals, (ſo called) conſiſting of between 5 and 600, except four or five families, who have taken the oath of allegiance, have embarked on board veſſels for Cape Francois. They had a weekly allowance in that province of proviſions, the ſame as ſoldiers, in hopes of their becoming ſubjects of Great Britain. Their removing is felt by the inhabitants in the extraordinary riſe of wood there, with which they uſed to cut and ſupply the town.

New York, Jan. 21. A large ſtore of the Pennſylvania manufactured cloths, ſwanſkins, ſtriped linſeys, and flannels, with fine and coarſe blankets in pairs, is already opened at Philadelphia, and meets with great ſales.

Newport, in Rhode-Iſland, Jan. 7. We have advice, that the French are ſettling, with 4000 perſons, a colony at the place called the Triangles, a little to windward of Surinam: that they claim as far weſtward as the Marawina, a part of which claim is within a few leagues of ſome Dutch plantations. This procedure of the French very much alarms their good friends the Dutch, who have ſent an expreſs to the States with an account of this affair; as alſo another to the commander of this new French colony, to know the reaſon of their forming this ſettlement. This ſtep is the more allarming on account of the great number of wild Negroes on the back of the Dutch plantations, who, though at peace now, may, perhaps, be made the ſame uſe of againſt the Dutch, as the Indians on the continent have been againſt the Britiſh ſettlements.

DOMESTIC OCCURRENCES.

Friday, March 1.

THIS being St. David's day, the titular Saint of Wales, the ſtewards of the Welch feaſt proceeded from the Thatched-houſe tavern to St. James's, where they were admitted to ſee the Prince of Wales, to whom they made an addreſs, and received a handſome return, with a preſent of 100 guineas towards the ſupport of the charity of educating poor Welch children. They had the honour to kiſs his Royal Highneſs's hand. They afterwards went to St. Martin's church, from which, after hearing a ſermon preached by the Rev. Mr. Edwards, Archdeacon of Brecon, they proceeded in great form to Merchant-Taylor's hall, where an elegant entertainment was provided.

Anne Ward, was convicted, at Hicks's-hall, of willfully ſetting fire to the warehouſes of Meſſ. Fletcher and Co. ſhipbuilders near Frying-pan ſtairs, Wapping: as was Iſaac Collins, at the ſame place, for uttering a great number of counterfeit quarter-guineas, in which, upon trial, there was not the leaſt gold.

Oxford. Laſt Wedneſday in the afternoon we had here very loud thunder, attended with uncommon flaſhes of lightning for this ſeaſon of the year, which were ſucceeded by a great fall of hail. This phenomenon was followed next morning, as well as yeſterday, by a deep ſnow; and the wind being pretty high ſome part of the time, in many places the ſnow is pretty much drifted; inſomuch that in the valleys of the open country, it is ſaid to be near ten feet deep. Some bye roads were by this means rendered dangerous; and even the great turnpike roads were ſcarce paſſable for heavy carriages, more particularly broad wheel wagons. The London ſtages, which ſhould have arrived here on Thurſday evening, did not come in till yeſterday afternoon; and though only loaded in the ordinary way, were in many places obliged to be drawn by ſixteen or eighteen horſes.

Saturday 2.] The ſeſſions ended at the Old Bailey, when ſentence of death was paſſed upon the five following perſons, viz. Charles Sebrey, for ſtealing money, &c. in the houſe of Mr. Compton, the Crown and Feathers, Holborn; John Hall, for ſtealing money from his maſter, John Tyner, a publican in Groſvenor-Mews; Richard Perry and John Taylor, for a burglary in the houſe of Hannah Medley, at Poplar; and John Cook, for forging a receipt in the name of James Montgomery, by which means he received wages due to John Montgomery for ſervices done on board the American man of war. Thirty-ſix received ſentence of tranſportation for ſeven years; ſix to be branded; and one to be whipped. Nineteen were acquitted.

The Cherokee Indians, who had been ſome months in England, embarked on board a ſhip in the Thames on their return home. *See page* 105.

Sunday 3.] A fire broke out in a two pair of ſtairs room at an oilman's, near the corner of Long-acre; and as it was near an hour before water could be had, it entirely burnt the upper part of the houſe where it began, and the adjacent houſe, a goldbeater's.

Two young fellows, clerks to a ſugar broker, in their return from Graveſend, by their want of experience in managing the ſails, overſet the boat, and were drowned.

Plymouth. Early this morning a fire broke out at the Three Crowns ale-houſe, on the

New

New Quay, near the Cuſtom-houſe, and conſumed the roofs and moſt of the inſides of two houſes. Under the ſame roofs there were upwards of 700 barrels of gunpowder, which were happily removed in time.

Monday 4.] A writ of *certiorari*, for removing the trial of a Peer, was laid before an auguſt aſſembly. *See page* 106.

Tueſday 5.] A fire broke out, between 4 and 5 in the morning, in the workſhop of Mr. Moore, ſtocking-trimmer in Frying-pan alley, Wood-ſtreet, and conſumed that building, with a great quantity of ſtockings, and great part of Mr. Moore's dwelling-houſe. The flames reached the ſtables belonging to the Coach and Horſes inn, ſeveral of which were conſumed, with ſeveral coach-houſes and carriages.

Wedneſday 6.] The noted Dick Swift was apprehended at Coventry for returning from tranſportation before the expiration of 14 years. *See page* 269 *of laſt volume.*

Thurſday 7.] The legacy of 500l. *per annum* left to Stephen Theodore Janſſen, Eſq; Chamberlain of London, was put up to public auction at Garraway's coffee-houſe, in Exchange-alley, for the quicker diſcharge of that worthy gentleman's unſatisfied debts, agreeable to his declaration at the time of his election; and was bought at ten years purchaſe by his brother William Janſſen, Eſq;

Being the Purim, or carnival, in commemoration of Queen Heſter and Haman, among the Jews, large turkies ſold in Duke's Place for a guinea, and large capons and fowls at 4 ſhillings a-piece.

Friday 8.] The ſcaffold for the trial of a peer was begun in Weſtminſter-hall. *See Monday* 4.

Saturday 9.] It is reported, that the Right Hon. William Pitt, Eſq; has brought a bill in chancery, to perpetuate the teſtimony of the witneſſes to the will of Sir William Pynſent, Bart. deceaſed. *See page* 53.

Monday 11.] Some thouſand oak plants have been lately ordered to be ſhipped for Minorca.

Tueſday 12.] Joſeph Thorpe, Thomas Lee, and other felons, in the New Gaol, Southwark, made another attempt to eſcape; but being overpowered, after a deſperate reſiſtance, were freſh ironed, and chained to the floor. *See page* 1095.

Wedneſday 13.] A butcher, having undertaken for a conſiderable wager to go 30 miles on the Whitechapel road in 2 hours, performed it within ſeven minutes of that time.

The back part of the houſe of Mr. Edwin, pipe-maker, in Hoſſeydown, was, by the violence of the wind, blown down, and a man, burning of pipes, unfortunately killed in the ruins.

A houſe was blown down in Theobald's Row, but no perſon hurt.

A dreadful ſtorm of hail fell at Panſwick in Glouceſterſhire. The air was ſuddenly overcaſt with ſuch a diſmal gloom, that one could ſcarcely ſee their hands; the wind blew a hurricane, and the hail began to pour down with aſtoniſhing force; when, in a few minutes, the whole atmoſphere ſeemed in a blaze, and a moſt tremendous burſt of thunder immediately ſucceeded. At this inſtant a large ball of fire fell from the clouds, in an irregular direction, near the ſteeple of Panſwick church. The ſexton's ſon had juſt been winding up the clock, and was faſtening the belfry window-ſhutter: at that moment the ball ſtruck the ſhutter, and beat it in with ſuch force, as to ſtrike down the boy, ſhatter ſeveral ſtones in the wall, and cauſe the chimes to play. With the violence of this ſtroke the fiery meteor dividing, part of it fell into the church-yard, and knocked down three boys, who had been playing there. One of them had his leg much burnt, the other two received but little hurt.

Thurſday 14.] Letters from Edinburgh obſerve, that the deſign of eſtabliſhing a foundling hoſpital in that city is ſo much oppoſed by the clergy, that it is likely to be fruſtrated.

Friday 15.] *Helſtone in Cornwall.* A fire broke out early this morning at the office of Mr. William Sandys, attorney, whoſe books, papers, writings, &c. to a very conſiderable value, were thereby conſumed.

Saturday 16.] At a common council at Guildhall, it was a[illegible]ed to join with the governors and directors of the Bank, to apply to parliament for leave to pull down ſome houſes in Threadneedle-ſtreet, towards the Manſion-houſe, to make the paſſage more open and commodious.—At the ſame time a motion was likewiſe made, that the freedom of the city ſhould be preſented to his Royal Highneſs the Duke of Glouceſter, which was agreed to, and the value of the box is to be 100 guineas.

Sunday 17.] Being St. Patrick's day, the tutelar ſaint of Ireland, the ſame was obſerved at Bours as a high feſtival, when the Knights of the three grand orders appeared in their reſpective collars.

Monday 18.] *Portſmouth.* Laſt Friday a ſeizure was made here of between thirty and forty hogs, ſaid to be brought from France; they are very fine and large: half of this goes to the poor of the pariſh. We are told that they are bought at one penny farthing per pound in France.

Tueſday 19.] A Jew Rabbi, who came here lately from Paleſtine, to make a collection for the ſupport of their colleges and ſynagogues there, ſet out for Holland, having collected here among the Jews about 800l.

Wedneſday 20.] *York.* A ſubſcription is ſet on foot by ſome gentlemen, farmers, and others, in the Weſt Riding of this county, for putting the laws in execution againſt all jobbers in cattle, butchers that ſell fat cattle and ſheep, and other monopolizers at fairs, markets, &c. A conſiderable butcher near Otley, has been fined 15l. for what is called jobbing of ſheep, he

having bought and sold forty, without keeping them the time stipulated by law.

Thursday 21.] A fire broke out, occasioned by some oil boiling over, at the floor-cloth manufactory in the fields, near the city new road, and consumed part of the building, but otherwise did no considerable damage.

Friday 22.] The following bills received the royal assent by commission, viz. The bill for punishing mutiny and desertion; the bill for the better regulating the marine forces, while on shore; the bill for the recovery of small debts at Blackheath, Bromley, &c. the bill for the recovery of small debts in the hundred of Chippenham, &c. in Wilts; the bill to permit the free importation of cattle from Ireland, for a limited time; the bill for providing a public reward for persons who shall discover the longitude at sea; the bill for laying a stamp duty in the British colonies in America; the bill for lighting, cleansing, and paving the streets, &c. in the city and liberty of Westminster, and for collecting certain tolls on Sundays; the bill for re-building the parish-church of Allhallows, London-wall, in the city of London; the bill for dissolving the marriage of John Nixon with Hester Spencer, his now wife; and to several naturalization bills, road bills, &c. The commissioners were the Earl of Marchmont, the Earl Gower, and Lord Mansfield.

Saturday 23.] *Cambridge.* The two gold medals, given annually by the Duke of Newcastle, for the encouragement of classical learning, were this week adjudged to Mr. Travis, of St. John's, and Mr. Shipperdson, of Trinity College, Bachelors of Arts.

Sunday 24. A pleasure cart, (as it is called) in which were three women and two lads, was overturned at Lower Holloway, in the road to Highgate, by which accident the women were terribly hurt, and one of the lads killed on the spot.

Monday 25.] A wholesale dealer in bacon, in Newgate-market, was convicted of selling by scales considerably deficient.

Some beautiful patterns, of a new damask manufacture, are arrived from Glasgow, and by good judges esteemed equal to the best imported from abroad.

Tuesday 26.] The bullion office at the East-India house, in Leadenhall-street, was found broke open, and robbed of two bags, containing together 1285 ounces of Mexico dollars.

Wednesday 27.] Seven persons, who kept public houses, and retale wines, were convicted in the penalty of 50l. each, without mitigation, for selling pints of wine in decanters not sealed.

A fire happened at a pitch and tar warehouse in Horsleydown, Southwark, and did considerable damage before it was extinguished.

The society for the encouragement of arts, &c. in the Strand, gave a bounty of 100l. to a poor tanner at Battel in Sussex, for discovering his invention for the improvement of the tannery business, by using oak saw-dust only instead of bark; and the skins tanned so by him, are found to be better than most sold at Leadenhall market, though they had been in the tan-pit but two-thirds of the usual time.

Thursday 28.] Being the anniversary feast of the London hospital, the marquis of Granby, and the other vice-presidents, with several of the nobility, &c. heard a sermon preached by the bishop of St. David's, at St. Lawrence's church, and went thence in procession to Merchant-taylors hall, where a sumptuous entertainment was provided, and a collection made for the charity, to the amount of 1,341l. 1s. 6d.

Saturday 30.] By a gentleman, who left East Florida in February last, we are informed, that Governor Grant had issued a proclamation for the sale of several lands in the province, at ten shillings the fifty acres, and one penny per acre quit-rent, payable after the first two years; that several had purchased already; and that Dennis Rolle, Esq. was clearing and improving a large tract of ground on the river St. Ivan, or St. John's; and that they talked of making great improvements and alterations on the harbour of St. Augustine, all the coast, shoals, and banks having been sounded, and exact charts making of them.

A mine of rich mixed ore has been lately discoverd in the west of England, conveniently situated for water carriage. It has been approved of by great assayers, and 2l. 2s. per Cwt. offered for liberty to carry on the work, and receive the profits.

A young man in Hertfordshire has invented a forcing engine for raising water, that consists of three boards, each an inch and a half thick, which are so put together, that the middlemost moves between the other two in a circular motion. It has neither cylinder, piston, valve, or spring, and is about the size of a large folio.

The national debt, on Jan. 5 last, was computed at 129,586,489l. 10s. 6½d. and the annual interest, and other charges attending the same, at 4,686,299l. 11s.

Letters from Fort Royal in the West Indies, mention a terrible fire having broke out, on Sept. 26 last, in the windward-most house in the town of Sauteure, and having destroyed that and twelve other houses.

A new China manufactory is established at Liverpool, and seems to promise great success.

Recent letters from Tobago mention, that a discovery is made there of an ancient Indian sepulchre, or burying-place, in which were found several mummies entirely preserved, supposed to have lain there long before the discovery of America.

At the assizes at Hertford, Robert Dodd was convicted for transportation, for stealing four Chinese pheasants belonging to his lady the countess Dowager of Essex.

At Chelmsford in Essex, David Brown and Edward Barnard received sentence of death, both for robbing on the highway; but the latter was reprieved for 14 years transportation.

At

At Winchester assize, five persons were capitally convicted.

At the assizes at Gloucester, nine persons received sentence of death; four of whom were left for execution, viz. John Couroy, for a highway robbery, William Obrien and James Wall, for stealing, and Richard Holmes for house-breaking. The other five, Thomas Townshend, William Newcombe, James Banfield, Thomas James, and Griffith Griffiths, were reprieved.

At Oxford, five persons were capitally convicted, viz. Thomas Holland, for a highway-robbery, Parker Hall, for burglary, Edward Woodbridge, for sheep-stealing, Thomas Plaster, for burglary, and Richard Aynsworth, for the same offence, but the three last were reprieved.

List of BIRTHS *for* 1765.

A woman of Ditchet, in Somersetshire, of a stout healthy boy, without arms or shoulders.

March 1. The Countess of Waldegrave, of a daughter, named Caroline.

5. The Countess of Moira, of a daughter.

Lady Catherine Henry, of a daughter, at Dublin.

Lady of Richard St. George, of Kilrush in the county of Kilkenny, Esq; of a son,

7. Lady Katherine Forbes, of a son, at Keith-hall in Aberdeenshire.

18. The Lady of Dr. Samuel Squire, bishop of St. David's, of a daughter.

21. Lady Sarah Stillingfleet, of two daughters, one of whom died in a few minutes after her birth.

List of MARRIAGES *for* 1765.

Mr. Thomas Jones, of Ludbury in Herefordshire, aged 97, to Miss Slade, aged 21.

Robert Hankey, Esq; son of Sir Thomas Hankey, to Miss Penton, sister to the member for Winchester.

James Plowden, Esq; of Hampshire, to Miss Sally Harris, daughter of Mr. John Harris, an eminent quaker at Baghurst, in the same county.

Henry Price, Esq; of Knighton, in Radnorshire, to Miss Foley.

Feb. 23. Michael Harding, Esq; at Truro, to Miss Adamson, of Tregony.

24. Stephen Nevinson, Esq; captain of marines, to the daughter of Alderman Eskricke, of York.

25. Henry Stapilton, of Wighill-park, Yorkshire, Esq; to Miss Warton.

26. Mr. John Goodwin, merchant, to Miss Fanshaw, of Manchester.

28. Charles Veaitch, Esq; major of the 67th regiment of foot, to Miss Sally Higgins.

March 4. Harcourt Muster, Esq; of Portsmouth, to Miss Charlotte Tessier.

5. George Barnard Kennet, Esq; to Miss Elizabeth Twesdale.

6. John Barton, Esq; captain in the navy, to Miss Penelope Bevois.

7. Launcelot Adamson, Esq; a blind gentleman of fortune in Jamaica, to Miss Jenney Wriothesley, a young lady of fifteen years of age.

Robert Scudamore, of Hampshire, Esq; to Mrs. Fitzharding.

Mr. James Lyade, packer, to the daughter of the late Alderman Gascoyne.

8. Charles Causton, of Highgate, Esq; to Miss Thomas.

11. Mr. Lawrence Porter, wholesale linen-draper in Cheapside, to Miss Althea-Barbara Allridge.

12. Samuel Smith, Esq; of the Old Jewry, to the niece of governor Worge.

13. Thomas Duckett, Esq; member for Calne in Wilts, to Miss Ferries, of Haverfordwest.

14. Michael Turner, Esq; to Miss Norton, of Fulham.

17. Silvester Usher, Esq; of Pocklington in Sussex, to Miss Harriot Cecil, daughter of the late Theodore Cecil, Esq; Turkey-merchant, who left her 150,000l.

19. George Pritchard, Esq; of Camberwell, to Miss Anne Nelson of Newington.

List of PROMOTIONS *for* 1765.

John Nelson, Esq; collector of the customs at Nevis.

Mr. Thomas Heckford, a commissioner of Bankrupts.

Edward Stopford, from half-pay, major to the 66th regiment of foot.

Alexander Johnstone, lieut. colonel of the 70th regiment.

Rev. Mr. Kettleby, geometry professor of Gresham-college.

Dr. Greive, physician to the Charter-house.

Nicholas Hyett, Esq; constable of the castle of Gloucester.

Sir Joseph Yates (one of the justices of the King's bench) chancellor of the chancery court of Durham,

Mr. Cooper, third clerk in the foreign department at the post-office, in room of Mr. Moore, appointed 2d clerk.

James Fortrey, Esq; one of the commissioners for victualling the navy.

The Hon. Walter Murray, receiver-general; Richard Murray, Esq; verdure-master and deputy-receiver, and James Potts, Esq; judge of the admiralty for the province of Quebec.

John Lanmore, Esq; assay-master and trier of tin in Devonshire and Cornwall.

Peter Mackenzie, gent. surgeon to the 3d regiment of dragoon-guards.

St. James's, March 26. The King has been pleased to promote the following Officers:

Lieutenant Generals. John Earl of Rothes to be general of foot; Harry Pulteney to be general of foot; Sir Charles Howard to be general of horse; John Duke of Argyll to be general of horse; James Oglethorpe to be general of

of foot; John Earl De Lawarr to be general of horſe.

Major Generals James Durand, John Marquis of Lorne, Daniel Webb, John Fitz William, James Patterſon, Robert Anſtruther, William A'Court, Charles Montagu, George Lord Forbes, John Stanwix, Charles Jefferyes, Sir Jeffery Amherſt, Joſeph Hudſon, Sir Henry Erſkine, Bart. Archibald Douglas, Robert Armigen, Sir John Griffin Griffin, Studholme Hodgeſon, George Auguſtus Elliot, Sir David Cunningham, Bart. Thomas Brudenell, to be *Lieutenant Generals*.

Colonels James Prevoſt, in America only, John Tooyey, Henry Whitley, John Clavering, George Cary, George Gray, James Adolphus Oughton, John Gore, James Murray, George Williamſon, Cyrus Trapaud, Sir William Boothby, Bart. William Keppel, Richard Pierſon, John Farbar, Benjamin Carpenter, John Owen, Bigoe Armſtrong, Edward Harvey, William earl of Shelburne, William Haviland, Ralph Burton, William Rufane, Hamilton Lambert, John Irwin, Cadwallader Blayney, Charles Vernon, William Ganſell, David Graeme, Marcus Smith, Edward Urmſtrong, to be *Major Generals*.

ECCLESIASTICAL PREFERMENTS.

Rev. William Tatton, D. D. canon and prebendary of Oſbaldwick, in the cathedral of York.

—— Mr. Sharpe, vicar of St. Bartholomew the Leſs, London.

—— Mr. Garden, reader, and Mr. Chatfield, afternoon-preacher, to the ſociety of Gray's-Inn.

—— Mr. Edwin Thomas, rector of St. John's and St. Peter's pariſhes in Baſſeterre.

—— Joſeph Driſield, A. M. rector of Allſaints in Eſſex, and of Chelſworth in Suffolk.

—— Charles Gretton, M. A. rector of Springfield and of Wickham in Eſſex.

—— John Mitchell, B. D. rector of Havant, near Portſmouth.

—— John Skinner, B. D. rector of Blatterwich, and of Baſton, in Lincolnſhire.

—— William Manning, M. A. vicar of Irthlingſtone, and rector of Wollaſton, Northamptonſhire.

—— James Alſton, A. M. vicar of Beddingford, Lincolnſhire.

—— Thomas Dampier, D. D. canon of Canterbury.

—— Mr. Stephen Eaton, rector of St. George's, Queen-ſquare.

—— Mr. Townſhowe, rector of Pentlowe, in Eſſex.

—— Mr. Nicholas Brown, vicar of Sutton Valence, in Kent.

Liſt of DEATHS *for* 1765.

Lately, Hon. Henrie Townſhend, at Lisbon, one of the commiſſioners of the victualling office.

Capt. Wm. Howard, of the royal navy, at Camberwell, aged 73.

Mr. Dominick Joyce, aged 120, at Carrowbeg in Ireland.

Mary Andrews, aged 107, in the workhouſe of St. Olave Southwark.

Robert Forbes, Eſq; at Marſeilles, deputy pay-maſter to the garriſon of Minorca.

A woman, aged 100 years, at Liege, who was but two feet eight inches high, and had never been able to walk without crutches.

The Hon. Wm. Richard Chetwynd, only ſon of the Lord Viſc. Chetwynd, abroad.

Feb. 20. The new-born ſon of the Prince of Tour and Taxis.

21. Lewis Schrader, Eſq; at his houſe in Soho-ſquare. He came into England with King George I. in 1714; in 1718, he was ſent envoy to Charles XII. of Sweden, and by ſome ſaid to have *witneſſed* that monarch's unfortunate end. In 1719, he went with Lord Carteret to Stockholm and Copenhagen; and in 1745, he returned to England.

Ralph Sowerby, Eſq; alderman of Newcaſtle upon Tyne.

24. Mr. Pett, maſter-cooper, at the victualling-office in Plymouth, ſaid to have left ten thouſand pounds to his children.

25. Mr. John Aſhton, many years ſteward of Chriſt's Hoſpital.

The lady of William Stone, Eſq; of Bloomſbury-ſquare.

27. Tho. Hyde, Eſq; near Cavendiſh-ſquare.

The relict of Sir Arthur Haſelrigg, Bart.

28. James Molesworth, Eſq; colonel in the army, and lieut. governor of Corke.

March 1. Abraham Cowley, Eſq; in the Strand, a deſcendant of the poet of that name.

Lady Sarah Ponſonby, daughter of the Earl of Beſborough.

2. Lady Iſabella Poulett, ſiſter to Earl Poulett.

Henry Hitch, Eſq; receiver-general, and general regiſter of the Weſt-riding of Yorkſhire.

3. Ralph Tooke, Eſq; formerly in the ſervice of the South Sea company.

Tho. Whalley, Eſq; of Nonſuch park, Surry.

4. Rev. Dr. William Stukely, aged 84, rector of St. George the Martyr, Queen-ſquare, governor of Chriſt's Hoſpital, ſenior fellow of the College of Phyſicians, F. R. S. and F. S. A.

Edward Owen, Eſq; of Ruſſel-ſtreet, Bloomſbury.

6. Robert Luckyn, Eſq; at Hackney.

7. Barton Buckley, Eſq; at Richmond.

Charles Graver, Eſq; at Highgate.

Rev. Mr. Barclay, of Merton college, Oxford.

Sir Geo. Dalſton, of Hearh in Yorkſh. Bart.

Rt. Hon. Lady Bulkley Williams, of Penrith in Merionethſhire.

Thomas Addiſon, Eſq; at Sudbury in Suffolk.

8. Mr. Eleazar Manaſſes Mordecai, a Portugueſe Jew, who lived upwards of 22 years in one appartment near Clapham-common, without ever ſtirring out of it, or opening his lips to

to any body but his landlady, who brought him every thing he wanted, and to whom he left a conſiderable fortune in ready money.

James Pennington, Eſq; in Jermyn-ſtreet.

Brooke Bridges, Eſq; of Ireland.

John Griffith, D. D. rector of Eckington in Derbyſhire, and canon of Canterbury.

9. The widow of Dr. Richard Smalbrook, biſhop of Litchfield and Coventry.

10. William Eyre, Eſq; ſerjeant at law.

—— Haynes, Eſq; at Brentford.

11. James Wallford, Eſq; at Stockwell in Surry.

Thomas Mille, Eſq; of Yarmouth.

12. Rev. Mr. Aſkeroft, rector of Upſall, in Bedfordſhire.

William Bowen, Eſq; at Chelſea.

Mr. James Leeke, of Saltcot in Somerſetſhire, clothier.

The Viſcounteſs Dowager of Grimſton.

The Lady of Peregrine Bertie, Eſq;

Hugh Maxwell, Eſq; of Dalminſton.

13. —— Farral, an Iriſh beggar, aged near 80, in whoſe bolſter there was found a bladder, containing 117 guineas, a ſix-and-thirty, and 19 quarter-guineas.

14. Robert Bicknel, Eſq; at Fulham.

Godwyn Howell, Eſq; of Radnorſhire.

15. Mrs. Wilſon, a widow lady, at Hackney.

16. The lady of Richard Cafe, Eſq; of Powick near Worceſter.

Mr. Richard Law, agent to the Duke of of Bolton.

17. German Pole, Eſq; at Redburn near Derby.

Mr. Thomas Farrant, one of the oldeſt agents belonging to the ſix clerk's office.

18. Mrs. Moore, wife of the Rev. Mr. Moore, rector of St. Bartholomew the Great.

Jeremiah Manwaring, Eſq; a Corniſh gentleman, at Kenſington.

Mr. James Clare, attorney, ſteward of St. Catharine's hoſpital near the Tower.

Miſs Harriet Ibbetſon, ſecond daughter of the late Sir Henry Ibbetſon, Bart.

19. Mrs. Anne-Margaret Edwards, relict of Francis Edwards, Eſq; at Knightſbridge.

21. Mr. John Vivian, of Truro in Cornwall, ſaid to have left upwards of 40,000l.

Mr. Solomon Richards, a Welch gentleman, aged 98, who for the laſt 50 years of his age, lived principally upon bread and vegetables, and never drank any thing ſtronger than water.

29. Mr. Joſeph Godfrey, merchant in Crutched Fryars.

Liſt of B——k——s for 1765.

John Farley, of Wolverhampton, mercer.

William Graham, of Rupert-ſtreet, Goodman's-fields, blackſmith.

James Wilks, of St. Thomas the Apoſtle, dealer in cotton.

Thomas Binns, of Sunderland, upholſterer.

Owen Brenan, of St. Giles's in the Fields, victualler.

Samuel Wilſon, of Clare-ſtreet, haberdaſher.

Richard Robins, of St. Neots, Huntingdonſhire, grocer.

Thomas Green, of Maſon's-alley, Coleman-ſtreet, broker.

Angelo Bernardi, of London, merchant.

NEW MEMBER.

Stafford. John Crewe, of Crewe, Eſq; in the room of William-Richard Chetwynd, Eſq; deceaſed.

LIST of PUBLICATIONS.

LOVE in high life. 2s. 6d. *Noble.*

Preferment, a ſatire. 1s.

A letter to the Houſe of Commons, on abuſes relating to proviſions. 1s. *Wilkie.*

Treatiſe on juſtification. 2s. 6d.

The Quack. 1s. 6d. *Wilkie.*

Wright's hiſtory of the late war, 2 vols. 10s. *Knox.*

Deſcription of the principal beauties in painting and ſculpture in the churches, &c. at Antwerp. 2s. *Davis.*

Marriage, an ode. 1s. *Dodſley.*

Memoirs of a Coquette. 3s. *Noble.*

The triumvirate, or memoirs of A, B, and C, 2 vols. 6s. *Johnſton.*

Claim of the colonies to exemption from internal taxes impoſed by parliament examined. 1s. *Fletcher.*

Dr. Sharp's ſecond argument in defence of Chriſtianity. 5s. *Whiſton.*

Rouſſeau on the truth of the Chriſtian religion. 6d. *Becket.*

Biſhop Ellis on the ſpiritual liberty of Proteſtants in England. 7s. 6d. *Dodſley.*

Dr. Wilſon's remarks on the autumnal diſorders of the bowels, and the nature of ſome ſudden deaths at that ſeaſon. 1s. 6d. *Wilſon and Fell.*

Rice's introduction to the art of reading. 4s. *Tonſon.*

Weſton's ſpecimens of abreviated arithmetic. 4s.

Reflections on the repeal of the marriage act. 1s. *Fletcher.*

The voluntary exile; or, Engliſh poet's ſermon in verſe. 2s. 6d. *Warcus.*

Religio-Laici. 2s. *Nicoll.*

Biſhop Cumberland's treatiſe on the laws of nature, tranſlated from the Latin by J. Maxwell, M. A. 14s.

An addreſs to the remaining members of the Coterie. 1s.

Remarks on the propoſed plan for regulating the paper currency of Scotland. 6d.

North Briton, extraordinary, publiſhed at Edinburgh. 6d. *Nicoll.*

Miſcellaneous pieces of ancient Engliſh poeſy. 2s. 6d.

*** *Our Correſpondent* N. S. *ſhall be obliged as ſoon as poſſible.* Florimond *muſt excuſe our inſerting his piece, the circumſtances it contains being no ways ſtriking.*

PRICE

PRICE of STOCKS *from* March 1, *to* March 28, 1765, *both inclusive.*

Days.	Bank Stock.	India Stock.	So. Sea Stock.	Sou. Sea Annuit. Old.	Sou. Sea Annuit. New.	Reduc. Bank 3 per Ct.	3 *per* Ct. Consolid.	3 per Ct. Consolid. 1726.	3 *per* Ct. Consolid. 1751.	3 per Cent. India Annuities	3½ *per* Ct. Bk Ann. 1756.	3½ *per* Ct. Annuit. 1758.	Navy 4 *per* Ct.	4 *per* Ct. 1763.	India Bonds prem.	Navy & Vic. Bil discou.	Exchcq. Bills prem.	New long An. Yrs pur.
1	129½	152a150½			85⅝a86	87¼a⅜87	87¼a87				89¼		92½a¼a¾	97¼	63s a 64	4½	3s	26⅛a¾
2	129½	151¼a152		86	85⅝a85	87¼a87	87¼a86⅞						99¼a½	98¼	62 a 60	4¼a⅜	2a1	26⅛a¾
4		152¼a151			84⅝a85	86⅞	86¼a⅛a¼					90⅞	99¼a½	98a⅛	59 a 60	4¼	2a1	26⅛a¾
5		150½a150	97½a97	85⅞a¾		87⅛	87a86¾			84¼a¼		91a¼	99¼a½	98¼a98	60	4¼a⅜	1a2	26⅝
6	129⅜a130	149½a150			84½a¾	87a86⅜	86⅛a¾a½		84¼		88½a½	91	99⅛a99	97⅞a98	55	4⅜a¼		26⅛a⅝
7						86¼a½	86⅞a½						99⅛a98	97⅞a98	54			26⅛
8	129⅝a130			85	84½	86⅛a½	86a85⅞		83a½⅛		88½		99a98	97⅞a98	54			26½
9				85⅝a¾		86⅝a86⅞	86½					91a⅛	99½a⅜a⅛	97⅜a⅝	53 a 54			
11			97½		84⅞a85	86¼a87	86⅜a¼						99⅛a¼	98¼a⅜	53 a 55			26⅛a¾
12				85⅞a86⅛		87a⅛	86¼a⅜					91½a⅝	99½a⅜	98⅜a½	54 a 55			26¾
13				85⅞	85a¼	87a⅛	86¼a⅜		84⅞a85		89¼a89	91½	99½a¼	98¼a⅞	55 a 56			26¼
14				85¼a⅞		86¼a⅞	86¼a⅜					91¼	99⅜a¼	98¼a½	55 a 58	3¼		26¼
15					84⅛a¼	86¼a⅜	86¼a⅜		84½		89a¼		99⅛a¼a⅜		59 a 60	4¼a4		26⅛a¾
16				85¼a86		86⅜a87	86¼a¼					91a⅛	99⅜		59 a 60			26¼
18				85⅛	84⅞a85		86⅜a¼						99⅛a¼		60 a 61			26¼a⅞
19				85⅛a86			86⅜					91⅛a¼	99¼a⅜		60 a 61			26⅜
20							86⅝a¾		84¼				99¼a⅛a⅞		61	3⅝		26¼a⅞
21			97½	85⅞a86	85		86¼a⅜					91⅛a¼	99⅛a⅜		61 a 62		1s dis.	26¾a⅞
22				86	84a⅛		86⅛a⅛				89¼		99¼a⅜		61			26¾a⅞
23				86a⅛			86⅜a¼					91⅛a¼	97½a⅝		62 a 63			26¼a⅞
25					85¼a½		86⅞a87						99⅛		62 a 63			26⅜
26							87						99⅛a⅞		62 a 63			26⅞
27							87		83⅛a¼		99¼		99⅞a¼		63 a 64	3⅛		26⅛a27
28				86⅛a½			86⅞a87					91⅛a½	99⅛a100		63 a 65	3⅛		26⅛a27

Prices of GRAIN, *&c. London,* Friday, Mar. 29.

Wheat	43s to 46s qu.	Tares	22s to 26s qu.
Barley	23s to 24s	Linseed	
Rye	19s to 20s	Hemp-Seed, York,	20s
Oats	12s to 16s	Ditto. W. Country	24s
Br. Malt	23s to 25s	Clover Seed per Cwt.	—
Pale Malt	24s to 29s	Fineſt Flour 33s	p. ſack
Boil. Peas	22s to 25s	Second Sort 31s	
Hog Peas	15s to 21s	Third Sort 29s	

Courſe of Exchange, London, Mar. 29.

Amſt.	36 8 2½ Uſ.	Madrid,	38 ⅞
Ditto at Sight,	36 5	Bilboa,	38¼
Rotterd.	36 8	Leghorn,	49
Antwerp,	no price	Genoa,	47⅞a48
Hamburgh,	34 11	Venice,	49 ⅞
Paris,	1 day's date 30⅛	Liſbon,	5s 5d ½
Ditto,	2 Uſ. 30 ⅛	Porto,	5s 5d
Bourdeaux,	30½ a ⅝	Dublin,	9 ½

The PRICE of GOLD and SILVER.

Gold in Coin	3l	18s	0d
Ditto in Bars	3l	18s	0d
Pieces of Eight: Pillar large		5s	3d
Ditto ſmall		5s	3d
Mexico large		5s	3d
Ditto ſmall		5s	3d
Stand. Silver in Bars		5s	4d½

Per Ounce.

Aids in the Exchequer	given for	Paid off
33d 4 Shil. Aid 1761	2000000	
34th 4 ditto 1762	2000000	1819000
35th 4 ditto 1763	2000000	1251000
Malt 1762	750000	259433

PRICES of HAY and STRAW.

Thurſday, March 28, 1765.

Whitechapel.	St. James's.	
Hay from 37s to 55s	40s to 56s	Per
Straw from 22s to 33s	27s to 31s	Load.

PaleMalt 24s to 29s	Finest Flour 33s	p.sack	Paris, 1 day's date 30	Lisbon, 5s 5d	Pieces Eig	Mexico large -	5s	3d	Per	Whitechapel.	St. James's.
Boil.Peas 22s to 25s	Second Sort 31s		Ditto, 2 Us. 30 ½	Porto, 5s 5d		Ditto small -	5s	3d		Hay from 37s to 55s	40s to 56s Per
Hog Peas 15s to 21s	Third Sort 29s		Bourdeaux, 30½ a ⅝	Dublin, 9 ½	Stand. Silver in Bars		5s	4d¼		Straw from 22s to 33s	27s to 31s Load.